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APPENDIX

TO

BENNETT'S LATIN GRAMMAR

FOR TEACHERS AND ADVANCED STUDENTS

BY

i. :

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PREFACE.

My purpose in the following pages has been to give such suggestions concerning the sounds, inflections, and syntax of the Latin language, as experience has shown are likely to prove of service to teachers and advanced students. In the former part of the work I have drawn freely upon the standard manuals of Seelmann, Brugmann, Stolz, and Lindsay; in the syntax I wish to acknowledge my indebtedness not only to Delbrück's recently published *Vergleichende Syntax*, but especially, for the moods, to the syntactical studies of Professor W. G. Hale, of the University of Chicago.

For the kind criticism of friends who have read my manuscript and have followed the book through the press, I desire here to extend my thanks, especially to Professors H. C. Elmer and George P. Bristol of Cornell University, Professors George Hempl, Francis W. Kelsey, and John C. Rolfe, of the University of Michigan, and Professor Alfred Gudeman, of the University of Pennsylvania. The chapter on Relative Clauses is the work of Professor Elmer.

C. E. B.

ITHACA, July 18, 1895.

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LIST OF ABBREVIATIONS AND SIGNS.

Archiv = Wölfflin's Archiv für Lateinische Lexikographie und Grammatik. Vols. I.-IX. Leipzig, 1884-1895.

CIA. = Corpus Inscriptionum Atticarum. Berlin, 1873 ff.

CIG. = Corpus Inscriptionum Graecarum. Berlin, 1828 ff.

CIL. = Corpus Inscriptionum Latinarum. Berlin, 1863 ff.

E. L. D. = Lewis, Elementary Latin Dictionary. New York, 1891.

Gr. or Grammar = the author's Latin Grammar. Boston, 1895.

Gröber's Grundriss = Gröber's Grundriss der Romanischen Philologie. Strassburg, 1888 ff.

Keil = Grammatici Latini, ed. Keil. Leipzig, 1855 ff.

Körting, Wörterbuch = Körting, Lateinisch-Romanisches Wörterbuch. Paderborn, 1891.

Marx = Marx, Hülfsbüchlein für die Aussprache der Vokale in positionslangen Silben. Berlin, 1889.

References by § are to the Appendix itself.

Words marked with a star are hypothetical forms.

Vowels printed without the macron $(e.g.\ a,\ e)$ are short; for greater precision these are sometimes printed with a breve $(e.g.\ \check{a},\check{e})$.

xiv

CHAPTER I.

THE ALPHABET.

- 1. The Latin alphabet is a development of that type of the Greek alphabet known as the Chalcidian. In the widest sense the term 'Chalcidian' is applied to all the non-Ionic Greek alphabets; in a narrower sense it designates the special alphabet of the Chalcidian colonies of lower Italy and Sicily. These colonies, settled originally from Chalcis in Euboea, date from very early times. Cumae, in fact, is said to have been founded as far back as 1050 B.C. But most of the Chalcidian settlements do not antedate the eighth century B.C. It was probably from the Campanian colonies of Cumae and Neapolis that some time in the sixth century B.C. the Chalcidian alphabet was introduced into Latium. Special peculiarities of this alphabet are the following:
- 2. The character Ξ was lacking, X was used as x, and Y (V) as ch. Lambda, which in Ionic had the form Λ , took in Chalcidian the form V, while Gamma (Attic Γ) was C. Besides K, another character for the k-sound existed, viz. Υ , called Koppa. For Rho, R was employed as well as P, the ordinary Attic form of that letter.

In conformity with its Chalcidian origin the earliest Latin alphabet consisted of the following twenty-one characters: A B C (=g) D E F Z H I K V M N O \square \cap R \leq T V X.

3. Of these characters, l subsequently became L. C in course of time came to be used for K, which then disappeared except in a few words: Kalendae, $Kaes\bar{o}$, $Karth\bar{a}g\bar{o}$. For the g-sound a new character, G, was invented, by appending a tag to the older C. But permanent traces of the original value of C as g, remained in

the abbreviations C. for $G\bar{a}ius$ and Cn. for Gnacus. The new character G took the place hitherto occupied by Z, which now disappeared. These changes are ascribed, with some degree of probability, to Appius Claudius, Censor 312 B.C. \Box was at first open as in Greek, but subsequently became P.

The Greek alphabet had no character to represent the sound of f, but the Greek Digamma (F) represented a closely related sound, v. This F, combined with H (apparently to indicate the voiceless character of the sound, as opposed to that of the Greek Digamma), was introduced into the early Italian alphabets to designate the sound of f. An example is FHEFHAKED (= fefaced, i.e. fecit), in the earliest extant Latin inscription, CIL. xiv. 4123. Later, the H was discarded and F used alone.

4. The Greek letters \odot (θ) , \oplus (ϕ) , and $\forall \ \forall \ (\chi)$, being aspirates, represented sounds which did not originally exist in the Latin language. These characters were accordingly introduced as numerals, \odot as 100, \oplus as 1000, \forall as 50. Subsequently \odot became \odot , and finally \circ . This last form resulted perhaps from associating the character with the initial letter of *centum*. \oplus became first \circ , and later \circ , a change facilitated probably by association with the initial letter of *mille*.

The half of \bigcirc , viz. D, was used to designate 500. \lor (50) became successively \downarrow , \bot , and \bot .

5. In Cicero's day Y and Z were introduced for the transliteration of Greek words containing v or ζ . Previously Greek v had been transliterated by u, and ζ by s (initial), ss (medial), as, Olumpio, sona ($\zeta \dot{w}v\eta$), atticisso ($\dot{d}\tau\tau \iota \kappa i \zeta \dot{w}$).

The Emperor Claudius proposed the introduction of three new characters, \exists to represent v (i.e. our w), \supset (Antisigma) for ps, and \vdash to represent the middle sound between \breve{u} and \breve{i} , as seen in optumus, optimus, etc. These characters were employed in some inscriptions of Claudius's reign, but gained no further recognition.

On the alphabet in general, see KIRCHHOFF, Studien zur Geschichte des Griechischen Alphabets. 4th ed. Berlin, 1887.

LINDSAY, Latin Language. Clarendon Press. Oxford, 1894. p. 1 ff.

Encyclopaedia Britannica, Article Alphabet.

JOHNSON'S Encyclopaedia, Article Alphabet.

2. In writing j in the Grammar to represent the Latin i- $c\bar{o}n$ -son $\bar{a}ns$, reference has been had mainly to practical considerations. Typographical distinction of the vowel and consonant sounds of i is absolutely essential to enable the pupil to tell them apart. Where i is written for both sounds there is nothing to show the student that $\bar{a}i\bar{o}$ is $\bar{a}j\bar{o}$; that $\bar{a}iunt$ is $\bar{a}junt$, or that $G\bar{a}ius$ is $G\bar{a}$ -i-us. Moreover, it is still usual to distinguish between the vowel and consonant u, by writing u for the former, and v for the latter. The two cases are perfectly parallel. See Deecke, Erläuterungen zur lateinischen Schulgrammatik, p. 8, Zusatz 2.

CHAPTER II.

PRONUNCIATION.

- 3. Sources of Information. Our sources of knowledge concerning the ancient pronunciation of Latin are the following:
- a) Statements of Roman writers. Much has been left by the Roman grammarians on the subject of pronunciation, - far more in fact than is commonly supposed. The remains of the grammatical writers as collected and edited by Keil under the title Grammatici Latini (Leipzig, 1855-1880) fill eight large quarto volumes. These writers cover the entire field of grammar, and most of them devote more or less space to a systematic consideration of the sounds of the letters. As representative writers on this subject may be cited: Terentianus Maurus (fl. 185 A.D.), author of a work entitled de Litteris, Syllabis, Metris; Marius Victorinus (fl. 350 A.D.); Martianus Capella (fourth or fifth century A.D.; not in Keil's collection); Priscian (fl. 500 A.D.), author of the Institutionum Grammaticarum Libri xviii. Even the classical writers have often contributed valuable bits of information, notably Varro in his de Lingua Latina, Cicero in his rhetorical works, Quintilian in his Institutio Oratoria, and Aulus Gellius in his Noctes Atticae.
- b) A second important source of evidence is found in inscriptions. The total body of these is very great. The Corpus Inscriptionum Latinarum, in process of publication since 1863, consists already of fifteen large folio volumes, some of them in several parts, and is not yet completed. These inscriptions disclose many peculiarities of orthography which are exceedingly instructive for the pronunciation. Thus such spellings as vrps.

PLEPS, by the side of VRBS, PLEBS, clearly indicate the assimilation of b to p before s. Even the blunders of the stone-cutters often give us valuable clues, as, for example, the spelling ACLETARVM for ATHLETARVM, which shows that the th was practically a t; otherwise we could not account for its confusion with c. See § 31.

- c) Greek transliterations of Latin words constitute a third source of knowledge. Not only Greek writers (especially the historians of Roman affairs), but also Greek inscriptions afford us abundant evidence of this kind. Thus the Greek Κικέρων (Cicero) furnishes support for the k-sound of Latin c; while Λιονία and Οὐαλεντία bear similarly upon the w-sound of Latin v. The inscriptions are naturally much more trustworthy guides in this matter than our texts of the Greek authors, for we can never be certain that the Mss. have not undergone alterations in the process of transmission to modern times.
- d) The Romance languages also, within limits, may be utilized in determining the sounds of Latin. See Gröber's Grundriss der Romanischen Philologie, Vol. I., Strassburg, 1888; W. Meyer-Lübke, Grammatik der Romanischen Sprachen, Vol. I., Leipzig, 1890.
- e) The sound-changes of Latin itself, as analyzed by etymological investigation. Modern scholars, particularly in the last forty years, have done much to promote the scientific study of Latin sounds and forms, and, while much remains to be done, the ultimate solution of many problems has already been reached. As representative works in this field may be cited:
- CORSSEN, W. Aussprache, Vokalismus und Betonung der Lateinischen Sprache. 2 vols., 2d ed. Leipzig, 1868; 1870. This work has been largely superseded by more recent publications, but is still valuable for its collections of material.

Brugmann, K. Grundriss der Vergleichenden Grammatik der Indogermanischen Sprachen. Vol. I. Strassburg, 1886.¹

¹ English translation under the title: Elements of Comparative Grammar of the Indo-Germanic Languages. Strassburg, 1887. A second edition of Vol. I. of the Grundriss is in preparation.

- STOLZ, F. Lateinische Grammatik in MÜLLER'S Handbuch der Klassischen Altertumswissenschaft. Vol. II. 2d ed. Nördlingen, 1889.
- STOLZ, F. Lautlehre der Lateinischen Sprache. Leipzig, 1894.
- LINDSAY, W. M. The Latin Language. Oxford, Clarendon Press, 1894.

 An admirable summary of the latest researches.

As special works on pronunciation alone may be cited:

- SEELMANN, E. Die Aussprache des Latein. Heilbronn, 1885. The most important work on the subject yet published.
- ROBY, H. J. Latin Grammar. Vol. I., 4th ed. pp. xxx-xc. London, 1881. ELLIS, ALEXANDER. The Quantitative Pronunciation of Latin. London, 1874. A discussion of special problems.

See also the chapter on 'Pronunciation' in the work of Lindsay above cited.

SUMMARY OF THE EVIDENCE.

THE VOWELS.

- 4. a. The consensus of the Romance languages indicates clearly that \bar{a} was pronounced substantially as in English *father*. In the absence of any specific evidence to the contrary, we may safely believe that \check{a} had the same sound *qualitatively*; in *quantity*, of course, it was less prolonged.
- 5. e. Long e was probably *close*, *i.e.* spoken with the lips relatively closed. *Cf.* such inscriptional spellings as pleibes, leigibrs (Brugmann, *Grundriss*, i. § 73). Short e was *open*, *i.e.* spoken with the lips relatively open. These differences in the pronunciation of \bar{e} and \check{e} are confirmed by the testimony of the grammarians, *e.g.* Marius Victorinus (Keil, vi. 33. 3); Servius (Keil, iv. 421. 17); Pompeius (Keil, v. 102. 4). The Romance languages also, though they have lost the original quantitative distinctions of the Latin, have preserved with great fidelity the qualitative distinctions of the close and open e. See § 36. 5. It is to be

noted that the relation between Latin \bar{e} and \check{e} stands in marked contrast with the relation existing between Greek η and ϵ . In Greek it was the long e-sound (η) that was open; ϵ was close. It should further be observed that in our normal English speech it is unusual and difficult to pronounce a pure \bar{e} . We regularly add an \check{e} -sound, and pronounce a diphthong, $\bar{e}i$, e.g. in fatal, paper, etc.

- 6. i. I. Long i was probably somewhat more open than English i in machine (Brugmann, Grundriss, i. § 41; Stolz, Lateinische Grammatik, § 32). The evidence for this is found in the occurrence of ei in inscriptions as a graphical variation of i, e.g. AVDEIRE, CIL. i. 196; VEIVOS; FAXSEIS. Short i was also probably an open sound, as suggested by its occasional representation in inscriptions by \check{e} , e.g. TEMPESTATEBVS (=-ibus).
- 2. Before the labials p, b, f, m, an earlier \check{u} changed to \check{i} in many words at about the close of the Republican period. Examples are:

recuperō reciperō lubīdō libīdō pontufex pontifex lacruma lacrima

māxumus, optumus, etc. māximus, optimus.

Quintilian, i. 7. 21, tells us that Julius Caesar was said to have been the first to introduce the new orthography. Inscriptions, however, show the occasional use of i for u before his time. In i. 4. 8 Quintilian further states that the sound was intermediate between i and u. The Emperor Claudius, it will be remembered, endeavored to secure recognition for a special character (\vdash) to represent this intermediate sound, which probably was approximately that of French u, German \ddot{u} . This view gains support from the occasional employment of y for i in words of the category under discussion, e.g. Contybernalis CIL. ix. 2608; Illacry-Mant. This y had the sound of \ddot{u} . See below under y.

7. o. Long o was close, i.e. nearer the u-sound; short o was relatively open, that is, nearer the a-sound. This is clearly indicated by the descriptions of the sound as given by the Roman grammarians, e.g. Terentianus Maurus (Keil, vi. 329. 130-134); Marius Victorinus (Keil, vi. 33. 3-8); Servius (Keil, vi. 421. 17-19); it is further confirmed by the testimony of the Romance languages, which, as in case of e (see above), have faithfully preserved the qualitative character of Latin \bar{o} and \bar{o} , while they have lost the original quantitative distinction. See § 36. 5.

Short o should never be pronounced like English \check{o} in hot, top, rock, not, etc. English \check{o} in these words really has a short a-sound. Latin \check{o} was a genuine o-sound. English $\check{o}bey$ and melody well exemplify it.

- **8.** u. Short u was relatively more open than \bar{u} , as is shown by the frequency with which Latin inscriptions show \check{o} for \check{u} , as ERODITVS, SECONDVS, NOMERO. The Romance languages also have o for Latin \check{u} , as Italian lova ($l\check{u}pus$); sovra (super); ove (ubi), etc.
- 9. y. In conformity with its origin, Latin y (= Greek v; see § 1.5) had the sound of French u, German \ddot{u} . Cf. Quintilian, xii. 10. 27, who mentions the sound as different from any existent in native Latin words. See Blass, Pronunciation of Greek, § 12.

THE DIPHTHONGS.

10. ae. 1. The original form of this diphthong was ai, a spelling which prevailed till about 100 B.C., e.g. AIDILIS, QVAIRATIS in the Scipio inscriptions (CIL. i. 32. 34). The sound was a genuine diphthong (that of ai in English aisle), and continued such throughout the classical period. Cf. the use of ai in Greek transliteration of Latin words, e.g. $\pi \rho a \hat{i} \tau o \rho$, $Ka \hat{i} \sigma a \rho$. Terentius Scaurus (first half of second century A.D.) bears testimony to the diphthongal character of the sound, when he says (Keil, vii. 16. 9),

- à propos of the orthography, that ae is a more accurate designation than ai, as the second element is an e-sound. This difference between ai and ae, though a real and perceptible one, was probably not very great.
- 2. By the fourth century A.D., however, ae had altered its character and had become a monophthong. This change had begun in the first century A.D., or even earlier. It originated probably in the rustic and provincial speech, but did not become general till late. Conclusive evidence of the new pronunciation is found in the frequent occurrence in inscriptions of such spellings as Cesar, Hec (= haec), Questor, etc. But this orthography does not become frequent till after 300 A.D. See Seelmann, Aussprache des Latein, p. 224 f.
- 11. oe. The earlier form of oe was oi. But oi regularly developed to \bar{u} , e.g. \bar{u} tilis for earlier oitilis; \bar{u} nus for oinos. In a few words oi resisted this change and became later oe, e.g. moenia (yet mūnio), foedus, etc. The sound was a genuine diphthong throughout the classical period. In the vulgar language we find traces of a monophthongal pronunciation in the third and fourth centuries A.D., a change which ultimately became prevalent. The evidence tends to show that ae, oe, and e in the late centuries became extremely similar in sound, a fact which gives us the key to the hopeless confusion of spelling in our mediaeval Mss. of the Latin writers. Thus we find caelum written as coelum, a spelling doubtless suggested in part by its fancied derivation from the Greek κοίλος 'hollow'; cēna, 'dinner,' appears variously as caena, and coena, the latter spelling being perhaps a result of association with Greek κοινός 'common,' i.e. 'the common meal'; ne, the asseverative particle, is often written nae, probably another instance of Greek influence. Cf. vai, 'verily.' Other instances of confusion are cerimonia for caerimonia; cemeterium for coemeterium (Gr. κοιμητήριον); moestus for maestus; foemina for femina; caeteri for ceteri (probably owing to the influence of Gr. καὶ ἔτεροι);

coelebs for caelebs; coecus for caecus. Some of these false forms are unfortunately still printed in our texts of the classical writers.

- 12. au was a true diphthong, pronounced like Eng. ow in how. Cf. Greek transliterations of Latin proper names such as Παουλλίνη (Paulīna), Φαοστίνος (Faustīnus).
- 13. en appears in Latin in only a few words, and in these is of secondary origin. Primitive Latin eu early became ou, whence \bar{u} . The chief Latin words that have eu are: ceu, neu, seu, neuter, neutiquam, neutique, heu. The combination appears also in numerous proper names borrowed from the Greek, e.g. $Eur\bar{o}pa$, Teucer. In all these the sound was that of a genuine diphthong, i.e. an e-sound quickly followed by an u-sound, both being uttered under one stress.
- 14. ui appears to have been a genuine diphthong in cui, huic, and hui (the interjection). In the first two of these words ui was certainly of secondary origin. Quintilian tells us (i. 7. 27) that in his boyhood (about 50 A.D.) quoi was still in use, and that its pronunciation was substantially identical with that of qui (the Nom.). Some scholars have accordingly inferred that qui and cui were simply graphically distinct, being alike in pronunciation. Consistently with this view they regard the u in cui as = v, and mark the i long, viz. cui. But if the facts were thus, we should expect cui, when resolved into two syllables in verse by metrical license, to be an iambus $(\smile \bot)$. Such is not the case. On the other hand, we find it appearing as a pyrrhic $(\cup \cup)$, and that, too, at just about the time when, if we may credit Quintilian, cui began to supersede quoi, viz. soon after 50 A.D. Apparently the earliest instance of the resolution mentioned is in Seneca, Troades 852 cuicumque (55 A.D.?). Subsequently in Martial and Juvenal such resolutions are frequent. See Neue, Formenlehre der Lateinischen Sprache, 3d ed., ii, p. 454. Very late writers (e.g. Prudentius, 400 A.D., Venantius Fortunatus, 600 A.D.), it is true,

sometimes have $c u \bar{i}$ in verse, but there is apparently no trace of any such resolution in the early centuries of the Empire. The i of cui would therefore seem to have been short, and to have blended with the u to produce a diphthong. It must, of course, be conceded that the pronunciation of cui could not have been widely different from $qu\bar{i}$; yet it must have been sufficiently so to keep the two words distinctly separate in Roman speech, a view which receives the very strongest confirmation in the fact that the modern Italian has chi as the descendant of Latin $qu\bar{i}$, but cui (with diphthongal ui) as the descendant of Latin cui.

THE CONSONANTS.

THE SEMIVOWELS, j, v.

- 15. J. 1. J (Seelmann, Aussprache des Latein, p. 231 ff.) was like our y in yes. Evidences:
- a) A single character (1) sufficed with the Romans to indicate both the vowel i and the consonant j (i $c\bar{o}nson\bar{a}ns$). This would indicate a close proximity in sound between i and j, a proximity manifestly existing if Latin j was English y. Cf., for example, English New York with a hypothetical New l-ork. In any English word the vowel i may easily be made to pass into the semivowel y by energetically stressing either the preceding or the following vowel.
- b) The Roman grammarians nowhere suggest any essential difference in sound between the vowel and consonant functions of the character I, as they almost certainly would have done had the consonant been other than the corresponding semivowel. On the other hand, the grammarians repeatedly suggest a close proximity in the pronunciation of i and j. Thus Nigidius Figulus is cited by Gellius (*Noctes Atticae* xix. 14. 6) as warning against the conception that I in IAM, IECVR, IOCVS is a vowel. Such a warning can have no meaning whatever, except upon the assump-

tion that the sound of j was very close to that of i, i.e, was the semivowel y. Cf. Quintilian i. 4. 10.

- c) In the poets, i, when followed by another vowel, often becomes consonantal, uniting with the preceding consonant to make position; e.g. abietis, parietem, ariete become abjetis, parjetem, arjete. In these cases the consonant sound can have been none other than that of the semivowel y. Cf. also nunciam (trisyllabic), compounded of nunc and jam; etiam, compounded of et and jam.
- d) Greek transliterations of Latin words employ ι as the nearest equivalent of Latin j, e.g. loólios (= Julius).
- 2. In the last centuries of the Empire j seems to have progressed, at least in the vulgar speech, to a genuine spirant, probably similar in sound to that of z in the English word azure. Thus in late inscriptions (from the third century on) we find such spellings as Zesu (= Jesu), zunior (= junior), sustus (= justus), Giove (= Jove). Cf. Seelmann, Aussprache des Latein, p. 239.
- 3. Intervocalic j had a tendency to develop an i-glide before it, which was sometimes expressed in writing. Inscriptions show MAHOR, POMPEHVS. According to Quintilian i. 4. 11, Cicero wrote AHO, MAHA.
- 16. I. V. V is a labial semivowel, with the sound of English w. It corresponds to the vowel u, just as j corresponds to the vowel i.

The evidences:

a) A single character (V) sufficed with the Romans to indicate the vowel u (u $v\bar{o}c\bar{a}lis$) and the consonant u (u $c\bar{o}nson\bar{a}ns$). This indicates a close proximity in sound between u and v,—a proximity which manifestly existed, if Latin v was English w. For the vowel u naturally passes into w before a vowel whenever either the preceding or following syllable is energetically stressed. For example, tenuia easily becomes tenvia, and must frequently be so read in verse.



- b) The Roman grammarians (at least down to the close of the first century A.D.) nowhere suggest any essential difference in sound between the vowel and consonant functions of the character V, no more than in the case of the analogous I. On the other hand, just as in the case of I, they repeatedly suggest that u and v were very similar. Thus Nigidius Figulus, cited above in connection with the discussion of j, observes in the same passage (Gellius xix. 14. 6) that initial V in Valerivs, Volvsivs, is not a vowel, an observation which would be pointless unless the sound of v had been closely similar to that of u, i.e. had been that of w. Quintilian in i. 4. 10 gives a similar warning.
- c) The same Nigidius Figulus (Gellius x. 4. 4) says that in pronouncing $v\bar{o}s$ we thrust out the edges of our lips, which conforms physiologically to the pronunciation of v as English w.
- d) The Greek ordinarily transliterates Latin v by means of ov, as Οὐαλέριος (Valerius), Οὐολσκοί (Volscī), Λιονία (Līvia).
- e) U and v often interchange in the same words. Thus early Latin la-ru-a (e.g. Plautus Captivi 598) appears later as a dissyllable, lārva. Similarly mī-lu-os appears later as mīlvus. In verse, silva occurs repeatedly as si-lu-a, e.g. Horace, Odes i. 23. 4. On the other hand, tenuis, puella, etc., often appear as tenvis, pvella, This interchange is conceivable only upon the supposition that the vowel and consonant sounds were closely akin. Velius Longus (close of the first century A.D.) in Keil vii. 75. 10, to the effect that a-cu-am, 'I shall sharpen,' and aquam, 'water' (where qu is simply the traditional inconsistent spelling for qv), were liable to confusion in his day. Caesellius (see Seelmann, Aussprache des Latein, p. 234) cannot say whether tenuis is a dissyllable or a trisyllable; while in the Romance languages we sometimes find doublets pointing to parallel Latin forms, one with u vocālis, another with u consonāns, e.g. Old French teneve (representing a Latin te-nu-is) and tenve (representing a Latin ten-vis). Italian soave points to the existence of a Latin su-ā-vis by the side of suā- (i.e. svā-) vis. Cf. Seelmann, p. 234.

- g) The contracted verb-forms, such as amāstī for amāvistī, dēlēstī for dēlēvistī, audīstī for audīvistī, commōssem for commōvissem, all point to a semi-vocalic sound for v, since this sound easily disappears between vowels in an unstressed syllable. Cf. English Hawarden, pronounced Hārden; toward, pronounced tōrd.

The evidence given under f) and g) holds, of course, only for the formative period of the language; but it is valuable as corroborative testimony. For Latin v is all the more likely to have been a semivowel in the historical period, if it was such immediately anterior to that period.

- h) Several anecdotes found among ancient writers give further confirmation of the similarity in sound of u and v. Thus Cicero (de Divinatione ii. 84) relates that, when Marcus Crassus was preparing to set sail from Brundisium on his ill-fated expedition to the East, he heard a vender of figs on the street cry out Cauneās, really the name of a variety of figs, but which Cicero suggests was intended by the gods as a warning to Crassus, viz. cav(e) $n(\bar{e})$ $e\bar{a}s$, don't go.
- 2. While the above evidence may be accepted as fairly conclusive for the pronunciation of Lat. v as w in the best period, indications are not wanting that it had begun to change to a spirant sound before the period of the decline. The earliest testimony on this point is that of Velius Longus (close of the first century A.D.), who speaks of v as having a certain aspiratio, e.g. in

valente, $primitiv\bar{v}$ (Keil vii. 58. 17). This reference to $asp\bar{r}r\bar{a}ti\bar{v}$ hints at the development of v from its earlier value as a bilabial semivowel to a bilabial spirant, somewhat similar to our English v, except that our v is labio-dental. This view is confirmed by the fact that, beginning with the second century A.D., we note that v is confused with b, which had also become a bilabial spirant at this period. This confusion, which increases as time goes on, reaches its height in the third century A.D. Examples are: BIGINTI $(=v\bar{i}gint\bar{i})$; VENE (=bene); FAVIO $(=Fabi\bar{o})$.

3. Some scholars have sought further confirmation of the spirant character for the period referred to (100 A.D. and afterwards) in the use of Greek β as a transliteration of Latin v. Beginning with about 100 A.D., we find β frequently employed in Greek inscriptions in place of earlier ov for such transliterations. e.g. κουβέντος (conventus); βέρνα (verna); Καλβείνος (Calvīnus). Similarly our text of Plutarch (about 100 A.D.) usually has β in Latin words (e.g. Βαλέριος, Βένους = Venus) where earlier Greek writers mostly employed ov. Now it is claimed (cf. Blass, Pronunciation of Greek, p. 109) that Greek β at this time (beginning of the second century A.D.) had become a bilabial spirant. ever this may be, little support would be gained from that fact for the pronunciation of Latin v. For while it is true that the use of β for v assumes great frequency from 100 A.D., yet the earlier spelling ov still remains the predominant one. Eckinger, Orthographie Lateinischer Wörter in Griechischen Inschriften, p. 87, gives 234 instances of ov as against 100 of β in Greek inscriptions of the second century A.D., while often the same inscription exhibits both spellings. Moreover, occasional instances of $\beta = v$ occur as early as the last years of the Republic. Eckinger, p. 87, cites five examples from the first century B.C., and twenty-one from the first The facts seem to indicate that the Latin sound was century A.D. not adequately represented by either ov or β ; consequently no permanent equivalent was ever adopted. It is, therefore, perfectly conceivable that Latin v should have been transliterated by Greek β , even at a time when the latter sound had not progressed to its spirant stage. In fact, it is quite possible that the confusion in Latin itself, which resulted in writing δ for v, may have contributed to the increasing frequency in the employment of β as against earlier ov in Greek transliterations of Latin words. The two phenomena coincide so accurately in time that the connection suggested becomes extremely probable.

Even if Greek β had by 100 A.D. become a bilabial spirant (as it certainly did ultimately), yet this would not necessarily prove anything for the pronunciation of Latin v. For the bilabial spirant is very easily confused with the semivowel. Thus the dialectal pronunciation of German Wein, Winter with an initial bilabial spirant easily deceives American and English travellers, to whom this sound is not familiar, and produces the impression that an English w is pronounced. The evidence of the Greek, therefore, is purely negative, and while it seems probable, as already indicated, that Latin v at about the beginning of the second century A.D. had begun to become a bilabial spirant, this conclusion rests upon other grounds than the evidence of Greek transliterations.

- 4. Gothic and Anglo-Saxon loan-words have been thought by some to confirm the w-sound of Latin v, but without reason. Gothic and Anglo-Saxon w, it is true, appears regularly as the representative of v in words borrowed from the Latin, e.g. Gothic wein, 'wine' (Lat. $v\bar{\imath}num$); aiwaggeli, 'gospel' (Lat. $\bar{\imath}vangelium$); Anglo-Saxon weall, 'wall' (Lat. $v\bar{\imath}llum$); -wic 'town' (Lat. $v\bar{\imath}cus$). But here again it is not only possible but extremely probable that the Gothic and Anglo-Saxon gave only an approximate representation of the Latin sound. Gothic could hardly have borrowed from the Latin before the fourth century, Anglo-Saxon not before the fifth, and it has been shown above that at this period Latin v had already become a bilabial spirant.
- 5. Others have cited Claudius's attempted introduction of \exists for v as an indication that v, as early as Claudius's day (50 A.D.), had progressed beyond the semivocalic stage. Claudius, it is

urged, while suggesting the employment of a new character for u $c\bar{o}nson\bar{a}ns$ (v), did not suggest a new character for i $c\bar{o}nson\bar{a}ns$ (j). Hence it is claimed that the relation of v to u, at this time, must have been different from that of j to i; as j was a semivowel, v, it is claimed, could have been nothing less than a spirant. But these conclusions would be valid only upon the assumption that Claudius was a competent phonetic observer, and was not acting from mere caprice. Neither of these assumptions would be safe. Moreover, there is no other indication that v had progressed beyond its value as a semivowel as early as Claudius's day.

6. It may be added in conclusion that the development of Latin v was not complete even when the sound had passed from that of a semivowel to that of a bilabial spirant. Later still (fifth or sixth century A.D.?) the bilabial spirant became a labio-dental spirant (Eng. v), and with that value passed into the Romance languages,—French, Italian, etc.

THE LIQUIDS, l, r.

17. L seems to have been pronounced differently, according to its position in a word. No fewer than three different sounds of the letter were recognized by Pliny the Elder, as cited by Priscian (Keil ii. 29. 9), viz., 1) an exīlis sonus, as in the second l of ille, Metellus; 2) a pinguis sonus, after a mute or at the end of a word or syllable, as in clārus, sol, silva; 3) a medius sonus, viz. when initial, as in lectus. Just what the differences were which were involved in these three modes of articulation cannot now be determined. Lindsay (Latin Language, p. 90) thinks that Pliny's exīlis sonus and medius sonus were our normal English l, as is the case in the Italian descendants of the Latin words cited by Pliny. The pinguis sonus, Lindsay suggests, consisted in an I-glide preceding or following the l itself, e.g. a'lter, cl'arus. The basis for this view he finds in the Romance development of this l pingue; e.g. clārus becomes Italian chiaro; flūmen becomes fiume; alter becomes French autre.

18. R was trilled with the tip of the tongue, as is clearly described by Terentianus Maurus (Keil, vi. 332. 238 f.) and Marius Victorinus (Keil, vi. 34. 15). The name litera canina, given to r as early as Lucilius (ix. 29, M.) agrees excellently with the enunciation attributed to the letter.

THE NASALS, m, n.

19. M. Initial and medial m probably had the sound of normal English m. As regards final m, the true pronunciation can probably never be satisfactorily determined. When the following word began with a vowel, final m was only imperfectly uttered. Cf. Ouintilian, ix. 4. 40: 'When m is final and comes in contact with the initial vowel of the following word so that it can pass over to the latter, though it is written, yet it is only slightly uttered, as in multum ille, quantum erat, so as to give the sound of a new letter. as it were. For it does not absolutely vanish, but is obscured, and is a sort of sign that the two vowels do not become merged.' In ix. 4. 39 Quintilian tells us that Cato the Elder wrote diee for diem, evidently in recognition of the vanishing value of the final nasal. Velius Longus also tells us (Keil, vii. 80, 12 ff.) that Verrius Flaccus, who lived under Augustus, proposed a mutilated M, viz. W, to indicate the sound of final m before an initial vowel. Seelmann (Aussprache des Latein, p. 356), following the above statement of Quintilian, defines the sound in question as a 'bilabial nasal spirant with partial closure.' This seems a just statement. Cf. also Lindsay, Latin Language, p. 62. Evidently the sound must have been quite inconsiderable, as it did not interfere with the slurring of final syllables in -m with a following initial vowel, as is abundantly shown in poetry by the frequency of elision. (Quantitative Pronunciation of Latin, p. 60 ff., especially p. 65) interprets the testimony of Quintilian above cited to mean that final m was not omitted (neque eximitur), but was inaudible (obscūrātur) before an initial vowel. The same scholar also maintains that every final m was inaudible, irrespective of the initial sound of the following word. In case this initial sound was a consonant, Ellis (pp. 55, 65) holds that the consonant was doubled in pronunciation; e.g. quōrum pars, he thinks, was pronounced quōruppars, etc. This view, however, is based on the improbable assumption that the Italian with its giammai (for gia mai), ovvero (for o vero), etc., gives the clue to the pronunciation of Latin final m. Latin inscriptions, it is true, in the earliest times show that final m was frequently omitted in writing. Thus the Scipio inscriptions, the earliest of which may antedate 250 B.C., show m omitted before consonants as well as before vowels, but in good inscriptions of the classical period final m was not omitted with any frequency; hence no argument can be drawn from this source.

- **20.** N. 1. N was the dental nasal as m was the labial. When initial, n could hardly have differed materially from English n in the same situation. The same is true also of n in the interior of a word when followed by other dental sounds (as t, d, s, n) or a vowel. Before the gutturals, n took on the sound of ng in sing, e.g. in ango, uncus; i.e. n here became the guttural nasal, a sound as different from dental n as is m, and quite as much entitled to representation by a separate character. Nigidius Figulus recognized the individuality of the sound in calling it n-adulterinum (Gellius, xix. 14. 7). Certain Roman writers, according to Priscian (Keil, ii. 30. 13), followed the analogy of the Greek, and used $g = \gamma$ nasal) for the *n*-adulterinum, e.g. Agchīsēs, agceps, aggulus. The Greek phoneticians gave y in such situations the name Agma (as distinguished from Gamma), and their Roman successors sometimes employed the same designation for the sound, e.g. Priscian in the passage just cited.
- 2. The vowel before nf, ns, as is well known, was regularly long in Latin. See § 37. Some have assumed, in consequence, that a nasal vowel was pronounced in such cases, particularly Johannes Schmidt (Zur Geschichte des Indogermanischen Vokal-

ismus I. p. 98 ff.). The chief basis of this hypothesis was found in the omission of n before s in inscriptions, e.g. COSOL (for $c\bar{o}nsul$), CESOR, TRASITY. Adjectives in -ensimus and adverbs in -iens were also often written -ēsimus, -iēs, e.g. vicēsimus or vicēnsimus; vīciēs or viciens. Velius Longus (Keil, vii. 78-79) tells us that Cicero pronounced forensia as foresia, and Megalensia as Megalesia, while in adjectives in $-\bar{o}sus$ the *n* was permanently lost. Greek transliterations of Latin words also frequently show σ for $\nu\sigma$ (ν s), e.g. Κλήμης (Clēmēns); Κησωρίνος. But all this evidence may indicate nothing more than that n before s was unstable and inclined to disappear. There is nothing to force the conclusion that nasal vowels were uttered in such cases in Latin, though it is, of course, possible that such a pronunciation existed. Whatever conclusion be drawn with regard to the nasalization of the vowel before as would seem to hold also for the vowel before n when followed by other dentals, viz. before nt and nd. For here, too, the n shows quite as strong a tendency to disappear, if we may judge by the testimony of inscriptions, e.g. SECVDO $(= secund\bar{o})$; TESTAMETO $(= testament\bar{o})$. No instance of the disappearance of n before f occurs prior to the fourth century A.D., and even then the phenomenon is of extremely rare occurrence, being confined to four instances, all of which are in the word inferus.

See the discussion of Seelmann, Aussprache des Latein, pp. 283-290.

3. It should be added that the omission of the nasal occurs sporadically in case of m when followed by labial sounds, as Decebris (= Decembris); $Cap\bar{a}num$ (= $Camp\bar{a}num$); so also in case of n-adulter $\bar{n}num$ before gutturals, as $iqu\bar{u}rant$ (= $inqu\bar{u}rant$); $pr\bar{c}ipis$ (= $pr\bar{n}ncipis$). The phenomenon under discussion is, accordingly, a general one, and may be stated thus: The Latin nasals m (labial), n (dental), and n-adulter $\bar{i}num$ (guttural), exhibit a tendency to disappear before labial, dental, and guttural sounds respectively.

- 4. gn. It has been held that gn was pronounced as ngn, i.e. as n-adulterīnum + n. The most recent representative of this view is Brugmann (Grundriss der Vergleichenden Grammatik, i. §§ 500, 506). Yet the evidence in favor of this theory is slight, consisting chiefly in the occasional occurrence in inscriptions of ngn for gn, e.g. CONGNATO, INGNOMINIAE. But such spellings as these could hardly have represented the prevailing usage of the best period.
- 5. Besides the three nasals already considered $(m, n, and n-adulter\bar{n}num)$, Seelmann (Aussprache des Latein, p. 270) recognizes another midway in sound between m and n, which he designates by m. The evidence for the existence of this sound he finds in the statement of Marius Victorinus (Keil, vi. 16. 4 ff.) to the effect that such an intermediate sound (neither m nor n) was recognized in antiquity. Marius Victorinus compares the sound in question with the sound of the Greek nasal in $\sigma \acute{a}\mu \beta v \acute{\epsilon}$, where likewise, he observes, neither ν nor μ accurately designates the pronunciation. Seelmann suggests that such inscriptional forms as QVAMTA, TAMTA, DAMDVM, SEMTENTIAM on the one hand, and DECENBRIS, SENPER, PONPA, INCONPARABILIS on the other, support by their vacillating spelling the theory propounded. The facts, however, do not seem sufficiently clear to warrant a positive conclusion in this matter.

THE SPIRANTS, f, s, h.

21. F. F is the labial spirant. In the earlier period it is probable that f was bilabial. This theory accords with the origin of f, which in most cases is the descendant of an original bh; it agrees also with such spellings as COMFLVONT, COMVALLEM of the Minucii inscription CIL. i. 199 (122 B.C.). Subsequently f became a labio-dental spirant as it is in English and in most modern European languages. At just what time this change took place is uncertain. It was complete by the close of the second century A.D., as appears from the testimony of Terentianus Maurus (Keil, vi. 332. 227).

- **22.** S. S was a voiceless dental spirant, like English s in sin. Some scholars, as Corssen, have thought that intervocalic s was voiced in Latin (i.e. sounded like English s in these), but there is no valid support for this view, nor do the Roman grammarians anywhere hint at more than a single sound for the letter. The Gothic in loan-words transliterates intervocalic Latin s by s, which represented a voiceless sound in Gothic, e.g. Kaisar (Lat. Caesar). The Gothic possessed also a character for the voiced s-sound (i.e. z), and would undoubtedly have made use of it, had the Latin intervocalic s been voiced.
- 23. H. H was a guttural spirant and was voiceless like English h. The same uncertainty manifested itself in the employment of initial h, as is noticeable among the lower classes in England. As a result of this uncertainty words etymologically entitled to initial h frequently dropped it in the speech of the less cultivated, while other words acquired an h to which they were not historically entitled. Thus harena, haruspex, hirundo, holus, represent the correct spelling; but these same words were frequently pronounced arena, aruspex, etc., and appear repeatedly in that form in our Mss. of the classical authors. Occasionally a word permanently lost its initial h even in the speech of the educated. A case in point is anser, which comes from an Indo-Eur. word with initial gh, and should appear in Latin as hanser (§ 97. 3). On the other hand erus, ūmor, umerus are the correct forms, but these were frequently supplanted by herus, humor, humerus. The Romans were fully conscious of their defects in this particular, and Catullus in his 84th poem humorously refers to one Arrius, who said hīnsidiās for īnsidiās, and Hionios for Tonios.

Intervocalic h easily vanished between like vowels, as is shown by such contractions as $n\bar{e}m\bar{o}$ for *ne-hem \bar{o} ; prend \bar{o} for prehend \bar{o} ; praeda for *prae-heda; etc.

THE MUTES.

THE VOICELESS MUTES, t, c, k, q, p.

- 24. T. T was pronounced as in English satin. In English. t before i followed by another vowel is regularly assibilated, i.e. acquires an sh-sound, as, for example, in the word rational; but Latin t was always a pure t in the classical period. Cf. such Greek transliterations as Οὐαλεντία (Valentia). In late imperial times (not before the fourth century) ti when followed by a vowel begins to show traces of assibilation. Inscriptions of this period exhibit such forms as Voconsivs (for Vocontius); SEPSIES (for septies). Probably this orthography was not exact, as the sound was rather that of our English sh; but the Latin had no more accurate designation. The phonetics of the change are as follows: An original Vocontius, for example, became first Vocontyus, i.e. the vowel i (very likely under the influence of extra stress upon the preceding syllable) became the semivowel y. In the next stage this semivowel became a spirant, the sound represented by German palatal ch, viz. Vocont-chus. From this, the transition to the assibilated pronunciation was easy and natural.
- **25.** C. 1. C was always pronounced like k. This is abundantly proved by the evidence. Thus:
- a) C and k interchange in certain words, e.g. Caelius, Calendae, Carthago.
- b) We have the express testimony of Quintilian (i. 7. 10), who says: 'As regards k, it should not be used. Some write it before a, but c has the same sound before all vowels.'
- c) In Greek transliterations of Latin words we always have κ , not only before a, o, v, but also before ϵ , ι , where if anywhere we should have expected the s-sound of c to have arisen. Examples are: $K\iota\kappa\epsilon\rho\omega\nu$, $Kai\sigma\alpha\rho$.

- d) Gothic and German loan-words borrowed from Latin (probably in the early centuries of the Christian era) show k for Latin c in all situations, e.g. Gothic lukarn (= Lat. lucerna); karkara (= Lat. carcer); Kaisar (= Caesar); German Keller (= cellārium); Kiste (= cista).
- e) The Old Umbrian of the Iguvine Tables uses in its enchoric alphabet n for c, and n for c (an s-like sound developed from c before e and e). The New Umbrian of the same tables is written in Latin characters, and uses n for n for n for the n-like sound represented in Old Umbrian by n d. This makes it clear that at the time the New Umbrian tablets were written, Latin n before n and n had not yet become assibilated. Otherwise the New Umbrian would not have resorted to the use of a special character (n or n to designate this sound. See Jones, Classical Review, No. 1, 1893. The exact date of the New Umbrian tablets is not certain, but they can hardly have been written many years before the beginning of the Christian era.
- f) No Latin grammarian ever mentions more than one sound for c, as some one certainly would have done, had c had an s-sound before e and i. In paradigms like $d\bar{i}c\bar{o}$, $d\bar{i}cis$, $d\bar{i}cit$, the change of sound, had it occurred, would have been too striking to escape comment.
- g) Pulcher (originally pulcer, and often so written in inscriptions) shows by its aspirated c (i.e. ch) that c must have been 'hard.' Similarly anceps, with its n-adulterīnum, shows that c could not have had the sound of s. Otherwise the nasal would not have become guttural, as we are assured it did.
- 2. Beginning with the fourth or fifth century A.D., c before i followed by a vowel becomes assibilated, exactly as explained above in the case of t. Inscriptions of this period exhibit such forms as FELISSIOSA ($=f\bar{e}lici\bar{o}sa$); MARZIAE ($=M\bar{a}rciae$). The phonetics of the change are precisely analogous to those already described under t. Later still, every c before e or i became s, e.g. PAZE (for $p\bar{a}ce$) in an inscription of the 7th century A.D.

- 3. This development of ti and ci (before vowels) to the same sibilant sound led naturally in mediaeval times to the greatest confusion of orthography in our Mss. of the Latin writers. Thus condicio appears frequently as conditio; suspīcio as suspītio; negōtium as negōcium; convīcium as convītium. In the case of some of these words, the false forms have not yet been entirely eliminated from our texts of the classic writers.
- 4. K and Q are simply superfluous duplicates of c, as was recognized by the Romans themselves. Cf. Terentianus Maurus (Keil, vi. 331. 204 f.).
- **26.** P. P was apparently our normal English p and presents no peculiarities.

THE VOICED MUTES, b, d, g.

- 27. B. B was like English b except before s and t, where it had the sound of p. This was simply the result of the natural assimilation of the voiced sound to the voiceless. Inscriptions show repeated instances of the phonetic spelling, e.g. PLEPS, APSENS, OPTINVIT, OPSIDES, but ordinarily such words made a concession to the etymology, and were written with b. Quintilian (i. 7. 7) prescribes the use of b: 'When I pronounce obtinuit our rule of writing requires that the second letter be b; but the ear catches p.'
- 28. D. D was like English d. Late in imperial times di, when followed by a vowel, became (through the medium of dy-) a sound somewhat like our j. The Romance languages retain this peculiarity, e.g. French journée, Italian giorno, from Latin diurnus.

Inscriptions show that final d had a tendency to become t, e.g. aput, haut, at, quit, for apud, haud, ad, quid. Mss. also exhibit the same spelling.

- **29.** G. G had the sound of English g in get. That before e and i it did not have the sound of g in gem, seems clear from the following evidence:
- a) The Roman grammarians give but a single sound for the letter. Had g before i been pronounced like our j, the alternation of sounds in a paradigm like $leg\bar{o}$, legis, or $l\bar{e}g\bar{e}s$, $l\bar{e}gum$, would not have failed to elicit comment.
- b) In the Greek transliteration of Latin words g is always represented by γ ; e.g. $\Gamma \in \lambda \cup S$ (Gellius).
- **30.** DISTINCTION BETWEEN 'GUTTURAL' AND 'PALATAL.'—'Guttural' and 'Palatal' are not interchangeable terms. Strictly speaking, 'Guttural' applies to the c(k) and g sounds produced in the throat, while 'Palatal' applies to those produced against the hard palate. The guttural or palatal character depends upon the following vowel. Before a, o, or u the c or g-sound is guttural; before e or i it is palatal. Cf. English kill, gill with call, gall. Latin k (used only before a; see § 1. 3) was, accordingly, always guttural; the same was the case with g, while g and g varied in character according to the following vowel.

THE ASPIRATES ph, ch, th.

31. I. The Latin originally had no aspirates of its own, and was not concerned with the representation of these sounds until the Romans began to borrow Greek words containing ϕ , χ , or θ . These Greek letters (as explained in the *Grammar*, § 2. 3) were equivalent to ρ , c, or t with a following h-sound. It is not surprising, therefore, that at first the Romans rendered ϕ , χ , θ by ρ , c, t respectively. Thus in early inscriptions (down to about 100 B.C.), we find Corintvs, Delpis, Aciles. In the *Captivi* of

¹ Initial and final p, c, and t, in stressed syllables, in English are also uttered with aspiration, though we do not indicate this in writing. Examples are: top, lock, pot.

Plautus, verse 274, the evident pun on $Thalem ... talent\bar{o}$, shows that the th was felt as substantially a t, and in fact there can be little doubt that t is what Plautus actually wrote.

- 2. Beginning, however, with about 100 B.C., Greek ϕ , χ , θ came to be represented with increasing frequency in Latin by ph, ch, th, and by Cicero's day this had become the standard orthography. The multitude of Greek words employed in Latin at that time, along with the constantly increasing attention paid by educated Romans to the Greek language and to Greek culture generally, naturally led to this striving for greater exactness.
- 3. As a result we notice the aspirates gaining a foothold in certain genuine Latin words, e.g. pulcher, originally pulcer; Gracchus (after Bacchus = Báxxos), originally Graccus; Cethēgus, originally Cetegus. An English analogy is seen in such words as island, rhyme. Island comes from the Anglo-Saxon Igland, Middle English tland. The s was introduced at a comparatively recent date as a result of associating tland with French tsle (from Latin insula). Rhyme comes from Anglo-Saxon rim, Middle English rime, 'number.' The spelling rhyme is due to the influence of rhythm (Greek ρυθμός), with which rime was associated in the folk consciousness. Cicero (Orator, 48. 160) tells how he himself, in deference to popular usage, was forced to abandon the pronunciation pulcer, triumpos, Cetegus, Kartago, in favor of the aspirated forms, pulcher, triumphos, etc. But he adds that he refused to pronounce an aspirate in sepulcrum, corona, lacrima, and some other words, where apparently a popular tendency existed in favor of ch, ph, th, as against the genuine Latin p, c, t. Catullus, in the epigram afready cited (Carmen, 84), humorously alludes to Arrius's pronunciation of commoda as chommoda.

In Bosphorus (Βόσπορος) the Romans introduced an aspirate for a tenuis; yet the spelling Bosporus also occurs.

4. With the exception of ph the Latin aspirates retained their original character throughout the history of the language. A proof that th was still an aspirate in the time of the Empire is

seen in the spelling ACLETARVM for $\bar{a}thl\bar{e}t\bar{a}rum$, and ACLHETICVM for $\bar{a}thl\bar{e}ticum$, in an inscription of about 360 A.D. (Wilmanns, No. 2639). This orthography is capable of explanation only on the ground that th was still very close to t (viz. t+h). For the confusion of c and t, cf. the occasional English pronunciation of at least as ac least. There is not the slightest indication that Latin th, either in the flourishing period of the language or in its decline, had a spirant sound like our English th in this or thin. The Romance languages regularly have t as the descendant of Latin th, e.g. Italian teatro (Latin the $\bar{a}trum$); catolico (catholicus). Similarly ch must have always been either a genuine aspirate or else the simple mute c, as shown by the Italian in such words as carta (Lat. charta), coro (Lat. chorus).

5. As regards ph, the aspirate seems in late imperial times (not before the fourth century A.D.) to have developed into the spirant f. Some have thought that this change occurred much earlier, basing their opinion upon the fact that Greek ϕ , which was regularly represented in Latin by ph, was always employed to transliterate Latin f. But ϕ was simply the nearest equivalent that the Greek alphabet possessed for representing f. Quintilian (i. 4. 14) shows that the two sounds were quite different, by his account of the Greek witness mentioned by Cicero who could not pronounce the Latin word Fundanius. This seems to show that the Greeks, not having the sound of Latin f (a bilabial spirant), chose ϕ (a bilabial aspirate) as the nearest equivalent, very much as Slavs and Lithuanians to-day reproduce the f of modern languages by p.

In the speech of the educated classes at Rome ph seems to have followed the history of ϕ in Greek. The latter sound, according to Blass (*Pronunciation of Greek*, § 28), did not become the equivalent of f before the third century A.D., a view substantiated for Latin by the interchange of f and ph in inscriptions of this and the following centuries. The phonetics of the change are as follows: First, we have p + h, i.e. the labial mute

+ a guttural spirant; secondly, the h is assimilated from the guttural spirant to the labial, f(i.e. pf); finally, the p is assimilated to f, giving ff, which is then simplified to f. Thus an original *Philippus* becomes successively *Pfilippus*, *Ffilippus*, *Filippus*, *Cf*. German *Pfalz* (the name of the district about Heidelberg). The mediaeval Latin designation of this was *Palantium*, whence *Phalantium*, German *Pfalz*, but dialectically often pronounced *Falz*.

THE DOUBLE CONSONANTS, x, z.

- **32.** X. X is always equivalent to cs, never to gz, as it sometimes is in English. This conclusion follows from the voiceless character of Latin s, before which a guttural was necessarily assimilated.
- 33. Z. The value of z is somewhat uncertain. The character is confined exclusively to foreign words, chiefly Greek. Though introduced in the first Latin alphabet, it was early dropped (see § 1. 3), its place being taken by G. Long afterwards,—apparently about Cicero's time,—it was again introduced for the more accurate transcription of ζ in words borrowed from the Greek. Prior to this time the Latin had transliterated Greek ζ when initial by s, and by ss in the interior of words, e.g. sōna $(=\zeta \omega v\eta)$; atticissō $(=a\tau v\kappa i\zeta \omega)$. But with the increasing use of Greek at Rome, a more accurate designation of the sound was felt to be necessary, and accordingly the Greek character itself was introduced. Cf. the care exercised at the same period in designating the aspirate in Greek loan-words.

The pronunciation of z in Latin must have followed the pronunciation of Greek ζ for the corresponding period. As regards ζ , while it almost certainly had the sound of zd in the Attic of the 5th century B.C., it is likely that by the beginning of the Macedonian period (approximately 300 B.C.), it had become a simple z-sound (as in English gaze), —though probably somewhat prolonged; for it still 'made position,' as though a double consonant.

See Blass, Pronunciation of Greek, § 31. The same sound probably attached to Roman z. For while certain Roman grammarians explain z as equivalent to sd or ds, their statements are probably but the echo of Greek discussions concerning the sound of z. It is worthy of note that one Roman grammarian, Velius Longus, a most competent witness on phonetic questions, specifically denies that z is the equivalent of sd, and asserts that it is not a double consonant at all, but has the same quality throughout. (Keil vii. 50. 9.)

DOUBLED CONSONANTS.

34. When the mutes were doubled (tt, dd; pp, bb; cc, gg) there were two distinct consonant articulations. Thus in mitto, the first t was uttered with a definite muscular effort, involving closure of the organs in the t-position; then after a momentary pause a second muscular effort followed, with the organs in the same position. See Seelmann, Aussprache des Latein, p. 110. Such doubled consonants do not occur in English. We often write tt, pp, cc, etc., but pronounce only a single t, p, or c, e.g. ut(t)er, up(p)er, etc. But in Italian and several other modern languages these doubled consonants are frequent, e.g. Italian bocca, conobbi, cappello.

The same double articulation is probably to be assumed in case of doubled liquids (ll, rr), doubled nasals (mm, nn), and doubled spirants (ff, ss), though it is possible that in some words where these combinations followed a long vowel they merely indicated a liquid or spirant that was prolonged in utterance, as, for example, $v\bar{a}llum$, $\bar{u}llus$.

DIVISION OF WORDS INTO SYLLABLES.

35. The principles given in the *Grammar* (§ 4) for the division of words into syllables are the traditional ones; yet the validity of some of them is open to question, — particularly of the principle embodied under § 4. 3: 'Such combinations of consonants as can

begin a word are joined to the following vowel.' In support of this principle may be cited the testimony of the Roman grammarians, who practically agree in prescribing the rule given above, and some of whom even include such combinations of consonants as can begin a word in Greek, e.g. pt, ct, bd. See for instance Caesellius, cited by Cassiodorus (Keil, vii. 205. 1); Terentianus Maurus (Keil, vi. 351. 879). Seelmann (Aussprache des Latein, p. 138) cites also the testimony of inscriptions. Some of these which mark the division of words into syllables by dots, apparently follow the principle under discussion, e.g. CIL. vi. 77 HE · DY · PNVS; vi. 11682 VI · XIT.

On the other hand it may be urged that the principle laid down by the Roman grammarians is merely an echo of rules maintained by Greek scholars for their own language. Cf., for example, Bekker, Anecdota Graeca, iii. p. 1127; Theodosius (ed. Göttling), p. 63, where the same laws for syllable division may be found. We have already seen indications of such irresponsible borrowing in the case of the testimony of the grammarians concerning the pronunciation of z. See § 33. Moreover, we find Ouintilian (i. 7. 9) advocating an etymological principle of division, e.g. haru-spex, abs-temius. As regards the testimony of inscriptions, the instances cited by Seelmann are very few. Seelmann himself (p. 143) admits the paucity of the material upon which he bases his conclusion, yet indulges the hope that investigation will bring further instances to light. However, in the very inscription from which he cites HE · DY · PNVS we find CAE · LES · TI, and in another (CIL. ix. 4028), which shows the division into syllables by dots, we find $ses \cdot tv \cdot lei \cdot vs$; $ses \cdot tv \cdot le \cdot io$.

There is also evidence of a phonetic nature bearing upon this question. It is a familiar fact that in verse, when a short vowel is followed by a mute with l or r, the poet may at his option use the syllable as long. Obviously this license consisted simply in combining the mute with the preceding vowel, while the liquid was joined with the vowel following. Thus the ordinary prose pro-

nunciation $a ext{-}gr\bar{t}$ would in poetry become $ag ext{-}r\bar{t}$, if the poet desired to use the first syllable as long, i.e. the open syllable of $a ext{-}gr\bar{t}$ became a closed syllable in $ag ext{-}r\bar{t}$; and a closed syllable is phonetically long. In the same way compounds whose first element ends in a mute, and whose second begins with l or r (e.g. $ab ext{-}l\bar{a}tus$, $ab ext{-}r\bar{a}d\bar{o}$), show that the mute must have been joined with the preceding vowel, making a closed syllable, since such syllables are invariably long in verse. In view of these considerations it seems most probable that in words like doctus, $magistr\bar{t}$, hospes, the actual division was $doc ext{-}tus$, $ma ext{-}gistr\bar{t}$, $hos ext{-}pes$. This division gives us closed (i.e. long) syllables. If we divide $do ext{-}ctus$, $ma ext{-}gi ext{-}str\bar{t}$, $ho ext{-}spes$, we get open syllables containing a short vowel, and it is impossible that such syllables should be metrically long, any more than a final short vowel before initial str or sp, e.g. opera struit, bona spes.

As regards the rule laid down in the *Grammar* (§ 4. 4), to the effect that prepositional compounds are separated into their component parts, the phonetic evidence seems altogether against this. The division $per-e\bar{o}$, $inter-e\bar{a}$, gives us a closed (i.e. long) syllable, whence it would appear that the actual division in such cases was $pe-re\bar{o}$, $inte-re\bar{a}$, exactly as in $ge-r\bar{o}$, $ie-r\bar{o}$; i.e. compounds were treated precisely like other words.

If, therefore, phonetic considerations are entitled to weight, we shall be justified in rejecting the testimony of third and fourth century grammarians, and in assuming that they rested their statements not upon phonetic observation of contemporary speech, but upon the traditions of their Greek predecessors; and in conformity with the phonetic evidence we may lay down the following substitute for \S 4. 3: In case of other combinations of consonants, a mute + l or r is joined to the following vowel, except when a long syllable is needed, in which latter case the mute is joined to the preceding vowel. Thus regularly pa-tris, $m\bar{a}-tris$, $a-gr\bar{\imath}$; but $ag-r\bar{\imath}$, when in poetry the first syllable is used as long. In prepositional compounds, also, whose first member ends in a

mute, and whose second begins with l or r, the mute is always joined to the preceding vowel, *i.e.* the preceding syllable is always long, *e.g.* ab- $l\bar{a}tus$, ab- $rump\bar{o}$. In all other combinations of consonants, the first consonant is joined to the preceding vowel, as al-tus, an- $g\bar{o}$, hos-pes, dic-tus, minis- $tr\bar{\imath}$, $m\bar{a}g$ -nus, $m\bar{o}n$ -strum. This principle obviously demands that x should be divided in pronunciation, as was undoubtedly the case. Thus $\bar{a}xis$ must have been pronounced ac-sis, $l\bar{a}xus$ as lac-sus; so, also, after a long vowel, $v\bar{i}c$ - $s\bar{i}$ ($v\bar{i}x\bar{\imath}$); $r\bar{e}c$ - $s\bar{i}$ ($r\bar{e}x\bar{\imath}$).

Rule 4 in § 4 of the *Grammar* may for all scientific purposes be abandoned, since, as already indicated, compounds call for the application of no special principles.

So much for the scientific aspect of the division of words into syllables. It has, nevertheless, been deemed best to make no changes in the traditional rules. For 1) Experience has shown that pupils ordinarily divide their syllables with phonetic correctness without the aid of rules. 2) The rules as given are seldom or perhaps never made a basis for the actual pronunciation of Latin, but serve only as a guide for printers, where a word is broken at the end of a line. As such a guide they furnish convenient working rules, which, though probably wrong, are, nevertheless, of world-wide acceptation and application, and in simplicity are superior to the true ones. It should always be borne in mind, however, that the traditional rules are simply mechanical, and that they probably do not represent the way the Romans spoke.

CHAPTER III.

HIDDEN QUANTITY.

36. A hidden quantity is the quantity of a vowel before two consonants. Such a quantity is called hidden, as distinguished from the quantity of a vowel before a single consonant, where the metrical employment of the word at once indicates whether the vowel is long or short. The quantity of a vowel before a mute with l or r is hidden unless the syllable containing it appear in verse used as short.

The methods of determining hidden quantity are the following:

- 1. Express testimony of ancient Roman writers, e.g. Cicero, Orator, 48. 159, where the principle for the length of vowels before nf, ns is laid down (see § 37); Aulus Gellius, Noctes Atticae, ii. 17; iv. 17; ix. 6; xii. 3. Nearly every Roman grammarian furnishes some little testimony of this kind, and though some of them belong to a comparatively late period, their evidence often preserves the tradition of earlier usage, and hence is entitled to weight.
- 2. The versification of the earlier Roman dramatists, especially Plautus and Terence, with whom a mute before a liquid never lengthens a syllable whose vowel is short. Hence, before a mute followed by a liquid, the quantity of the vowel always appears in these writers, being the same as the quantity of the syllable, just as in case of a vowel followed by a single consonant.

Furthermore, Plautus and Terence not infrequently employ as short many syllables which in classical poetry would be invariably long by position. Examples are the following: juvěntūs, Plautus, Mostellaria 30; Curculio 38; voluntās, Trinummus 1166; Pseu-

dolus 537; Stichus 59; volŭptās, Mostellaria 249, 294; Amphitruo 939, and elsewhere. These cases are to be explained by the fact that the vowel was short and the following consonants failed to 'make position.'

In some instances, it must be confessed, even long vowels are used as short, e.g. bonis mis, Plautus, Trinummus, 822, foris pultābō, 868. But these cases are of a peculiar sort and may be explained on metrical grounds, or by the iambic nature of the words, as in the examples cited. Cf. § 87. 3.

3. Inscriptions.—Since the middle of the first century B.C. the apex (or point) appears added to the vowels a, e, o, u to indicate their length. Long i was designated originally by | (rising above the other letters and hence called i longa) and by ei; later, \bar{i} took the apex. Examples are TRÁXI, CIL. x. 2311; PRISCVS, CIL. xi. 1940; ÓLLA, CIL. vi. 10006; QUINQVE, CIL. vi. 3539; MILLIA, Monumentum Ancyranum i. 16; FECEI, CIL. i. 551.

Before the employment of the *apex* the length of the vowel in case of a, e, u was indicated by doubling the vowel, e.g. PAASTORES, CIL. i. 551; PEQVLATVV, CIL. i. 202; o is never doubled in this manner. This peculiarity belongs to the period 130-70 B.C.

A thoroughly consistent use of these methods of designating the vowel quantities is found, it must be admitted, in but few inscriptions. Of the vowels contained in syllables long by position only a portion are marked, as a rule, in any single inscription. Certain official inscriptions of the late republican and early imperial period form an exception to this, and exhibit very full and reliable markings, e.g. the speech of the Emperor Claudius (Boissieu, Inscriptions de Lyon, p. 136) and the Monumentum Ancyranum, containing the Rēs Gestae Dīvī Augustī. This latter, among a great number of correct markings, contains also some false ones, e.g. CLÝPEI, SYMMÁ. Such errors also occur occasionally elsewhere.

4. Greek transcriptions of Latin words. — This method is most fruitfully applied in case of the vowels e and o. The employment of Greek ϵ or η , o or ω makes the quantity of the Latin vowel

certain, wherever faith may be reposed in the accuracy of the transcription. Thus we may write \bar{E} squiliae in view of 'Hσκυλίνος, Strabo, v. 234, 237; Vērgilius, after Οὐεσοντίων. Vesŏntiō, after Οὐεσοντίων. Dio Cassius, lxviii. 24.

The quantity of i may also often be determined by Greek transliterations. Thus $\epsilon \iota$ before two consonants regularly points to Latin $\bar{\imath}$, e.g. Bei ψ avios, CIG. 5709, = $V\bar{\imath}ps\bar{a}nius$; Greek ι points to Latin $\bar{\imath}$, e.g. Totpos = $\bar{I}ster$.

Inscriptions are naturally of much greater weight in such matters than are our texts of the Greek writers. Cf. \S 3. c).

5. The vocalism of the Romance languages. — These languages, particularly the Spanish and Italian, treated e, i, o, u with great regularity according to the natural length of the vowel. It will be remembered that Latin \bar{e} and \bar{o} were close; Latin \bar{e} and \bar{o} open. Now the Romance languages have not preserved the original quantity of Latin vowels; for both the long and the short vowels of the Latin have become half-long in Romance; but they have very faithfully preserved their quality. Thus Latin \bar{e} appears as a close e in Italian and Spanish; Latin \bar{e} as an open e or as e. Latin \bar{o} appears as a close e in Italian and Spanish; Latin \bar{o} as an open e or as e0 or as e1. Similarly Latin e2 remained e2, but e3 became a close e3; Latin e4 remained e4, but e5 became a close e5; Latin e6 remained e7, but e8 became close e9. Examples:—

LATIN.	Italian.
mēnsis.	mese (with close e).
honëstus.	onesto (with open e).
responsum.	rispose (with close o).
doctus.	dotto (with open o).
dīxī.	dissi.
dictus.	detto (with close e).
$d\bar{u}x\bar{i}$.	-dussi.
dŭctus.	-dotto (with close o).

The Romance languages, however, authorize conclusions only with reference to the popular language as opposed to that of the better educated classes. In the popular speech the tendency was

rather toward the shortening of long vowels than toward the lengthening of short ones. Hence where the Romance languages point to a long vowel in the popular language, it is safe to assume that the vowel was long in the literary language. When, on the other hand, the Romance languages point to a short vowel, this testimony is not necessarily conclusive, particularly if other facts point clearly in the opposite direction.

Again the Romance languages authorize conclusions only in case of words inherited from the Latin. Many Romance words represent mediaeval borrowing by the learned class, as Italian rigido, cibo, metro, tenebre, pustula, lubrico. All such words retain the Latin vocalism. In some cases it is difficult to decide whether a word has descended by the popular or the learned channel, e.g. luxus, urna.

With all the assistance furnished by the methods above enumerated, there nevertheless remain many words whose vowel quantity cannot be determined. It is customary to regard all such vowels as short until they are proved to be long.

The following are the most important works of reference on this subject:

MARX, Hülfsbüchlein für die Aussprache lateinischer Vokale in Positionslangen Silben. 2d ed. Berlin, 1889. A work valuable for its collection of evidence, but frequently untrustworthy in its conclusions.

SEELMANN, Die Aussprache des Latein. Heilbronn, 1885. p. 69 ff.

GRÖBER, Vulgärlateinische Substrata Romanischer Wörter, a series of articles in Wölfflin's Archiv für Lateinische Lexikographie, vols. i-vi.

KÖRTING, Lateinisch-Romanisches Wörterbuch. Paderborn, 1891.

LINDSAY, The Latin Language. Oxford, 1894. p. 133 ff.

D'OVIDIO, in Gröber's Grundriss der Romanischen Philologie. Strassburg, 1888. i. p. 497 ff.

MEYER-LÜBKE, Grammatik der Romanischen Sprachen. Leipzig, 1890.

CHRISTIANSEN, De Apicibus et I Longis. Husum, 1889.

ECKINGER, Orthographie Lateinischer Wörter in Griechischen Inschriften.
Munich.

Further literature up to 1889 is cited by Marx, p. xii.



GENERAL PRINCIPLES FOR THE DETERMINATION OF HIDDEN QUANTITY.

Vowels before ns, nf.

- **37.** A vowel is always long before ns and nf, e.g. consul, infelix. This principle rests upon the following evidence:
- a) Cicero, Orator, 159, expressly states that in compounds of con and in, the vowel was pronounced long when followed by f or s.
- b) Before ns the vowel is often marked in inscriptions with an apex, as CIL. xii. 3102 CÉNSOR; CIL. vi. 1527 d. 64 CÓNSTÓ; CIL. xi. 1118 MÉNSVM; the apex occurs less frequently before nf e.g. CIL. xi. 1118 CÓNFICIVNT. But i longa occurs repeatedly before both ns and nf, e.g. CIL. iii. 67 INSPEXI; vi. 647 INSTRVX-ERVNT; CIL. ii. 4510 INFERIORIS; CIL. xiv. 1738 INFANTI; CIL. x. 4294 INFERRI.
- c) Greek transliterations of Latin words often indicate a long vowel before ns, as Κρήσκηνς (= Crēscēns); Προύδηνς (= Prūdēns).

Vowels before gn, gm.

38. Vowels are long before gn in the suffixes -gnus, -gna, -gnum. In support of this we have the direct testimony of Priscian (Keil, ii. 82. 7), who lays down the above principle and gives as illustrations: regnum, stagnum, benīgnus, malīgnus, abiegnus, prīvīgnus, Paelīgnus. Inscriptions also have régnvm (CIL. vi. 7578); SIGNVM (CIL. vi. 10234); DIGNI (CIL. x. 5676); PRIVIGNO (CIL. vi. 3541).

This rule is often formulated to include all vowels before gn (e.g. by Marx, p. 1); but there is no evidence to support such a principle. In $gign\bar{o}$, for example, and in such forms as $cogn\bar{o}sc\bar{o}$, $cogn\bar{a}tus$, $ign\bar{a}rus$, $ign\bar{a}vus$, $ign\bar{o}r\bar{o}$, $ign\bar{o}sc\bar{o}$, there is nothing to show that the vowel was long. Marx holds that the vowel in these

latter forms was long as the result of compensatory lengthening, $ign\bar{a}rus$ being for *in- $gn\bar{a}rus$, $cogn\bar{o}sc\bar{o}$ for *con- $gn\bar{o}sc\bar{o}$. But no such theory of compensatory lengthening is tenable. Moreover, a Greek inscription (CIG. i. 1060) has $\kappaoy\nu(rov = c\bar{o}gnit\bar{u}$. 'Eyvárus also in Greek texts shows another genuine Latin word with a short vowel before gn. Cf. also Latin ambiegnus (ambi+agnus), which indicates that agnus had \bar{a} before gn; for \bar{a} is retained in compounds, while \bar{a} regularly becomes \bar{c} . Marx's appeal (p. 1) to the fact that Plautus always uses the syllable before gn as long, is of no weight, since we should naturally expect gn to 'make position' in Latin just as $\gamma \nu$ regularly does in Greek.

Conservative procedure demands, therefore, that the vowel before gn should be recognized as long only in words of the type mentioned by Priscian and in such others as are supported by definite evidence. Some scholars have even been inclined to reject Priscian's testimony altogether. The Romance languages might at first sight seem to warrant this attitude. For we find Latin dignus, signum, lignum appearing in Italian as degno, segno, legno with close e. This close e regularly points to a short Latin i (see § 36. 5). But it is possible that the \bar{i} of Latin was shortened in the Romance (see § 36. 5); or it may be that the i in the Latin words was long but somewhat more open than the ordinary Latin i. In this latter case the close e of Italian degno, segno, legno (= open i) would be an indication of the fidelity with which the Romance languages have preserved the quality of the Latin vowels. This second view is that of W. Meyer (Kuhn's Zeitschrift, xxx. p. 337).

39. Before gm the vowel is long in pigmentum (see CIL. viii. 1344, PIGMEN[T), and in segmentum (assured by the Greek σηγμέντα); but there is no evidence to warrant the formulation of a broad rule embracing all vowels before gm, as is done by Marx (p. 1). Marx appeals to the analogy of gn in support of his contention; but if analogy could prove this, it would

similarly prove that every vowel before ms is long, after the analogy of the long vowel before ns. Marx's second argument, that the syllable before gm is always long in Plautus, is of no more weight than the same argument as urged in behalf of gn. It may therefore be seriously questioned whether there is any justification in including gm in the list of combinations before which a vowel is regularly long.

Vowels before nt, nd.

- 40. 1. All vowels are regularly short before nt and nd, e.g. amandus, montis, amant, monent.
 - 2. Exceptions:
 - a) Before nt the vowel is long in
 - a) quintus (from quinque).
 - β) the following contracted words: contio (for coventio), jentāculum (for *jējūntāculum), jentātio (for *jējūntātio), nūntius (for *noventius ?).
 - γ) Greek proper names in -ūs, Gen. -ūntis, e.g. Selīnūs, Selīnūntis (Greek, Σελινοῦντος).
 - δ) Greek proper names in -ōn, Gen. -ōntis, e.g. Xenophōn, Xenophōntis (Greek, Ξενοφώντος).
 - b) Before nd the vowel is long in
 - a) the following contracts and compounds: prēndō (for prehendō), nōndum (nōn + dum), vēndō (vēnum dō), nūndinus (novem diēs), quīndecim (quīnque), ūndecim (ūnus).
 - β) some Greek names, e.g. Charondas, Epamīnondas (-ώνδας).
- 3. The evidence for the short vowel before nt lies in the fact that, while in the Nominatives of such words as clēmēns, crēscēns, cliēns, fons, gēns, parēns, pons, praesēns, the long quantity of the vowel is assured either by the presence of the apex, or by a long vowel in Greek transcriptions, in the oblique cases the apex is

lacking, and in Greek transcriptions the vowel is short, e.g. Κλήμης (i.e. Κλήμηνς), CIA. iii. 1094, but Κλήμεντος, CIG. 3757; Κλήμεντι, CIG. Addenda, 1829 c.; CRÉSCÉNS, CIL. xii. 4030, but CRÉSCENTI, CIL. vi. 9059; Κρήσκηνς, CIG. 6012, c.; but Κρήσκεντι, CIG. Addenda, 1994, f.; Πραίσης (i.e. Πραίσηνς), CIA. iii. 1147, but Πραίσεντι, Πραίσεντα, CIG. 3175, 3991; VALÉNS, Greek Οὐάληνς, Fröhner, Inscriptions de Louvre, 120, but Οὐάλεντι, CIG. Addenda, 5783, c.

Even where a vowel is naturally long, it sometimes becomes shortened before *nt*, e.g. in *linteum* from *līnum*; cf. Greek λέντιον CIG. 8695.

For the vowel before nd the evidence is not so full. We find the Greek transcriptions Καλένδαις, Lydus, de Mens. iv. 53, 57; Φονδάνιος (i.e. Fundānius), Bulletin de Correspondance Hellénique, ix. p. 439; also Τούενδος, i.e. tuendus, CIG. 5600.

PONTEM, FONTEM, MONTEM, FRONTEM, FRONDEM.

- 41. A difference of opinion exists as to the quantity of the vowel before nt in the oblique cases of $f\bar{o}ns$, $m\bar{o}ns$, $p\bar{o}ns$, $fr\bar{o}ns$ (frontis); and before nd in $fr\bar{o}ns$ (frontis). Three sets of facts are to be considered:
- a) The analogy of other words in -ns (Gen. -ntis). Such words, so far as they are genuine Latin words, have, without exception, a short vowel before nt in the oblique cases. See § 40.
- b) The testimony of the Romance languages. This is as follows for the different words under discussion:

fons. The Romance languages seem to point to an antecedent fontis, fonti, etc. Thus the Italian fonte has close o; so the Provençal fon. Spanish alone with its fuente points to fontem (Gröber, Archiv, ii. p. 426; Körting, Lat.-Romanisches Wörterbuch, col. 337).

frons (-ndis). The Romance languages all agree in pointing to frondem (Gröber, Archiv, ii. p. 426; Körting, Wörterbuch, col. 345).

frons (-ntis). Provençal fron and Italian fronte, with close o, point to frontem. So the other Romance languages, except Spanish, which has fruente, pointing to frontem. (Gröber, Archiv, ii. p. 426; Körting, Wörterbuch, col. 345).

mons. The Romance languages point unanimously to montem (Gröber, Archiv, ii. p. 426; Körting, Wörterbuch, col. 499).

pons. Provençal pon and Italian ponte with close o point to $p\bar{o}ntem$; so the other Romance languages, except Spanish, which has puente, pointing to $p\bar{o}ntem$.

If mere numerical preponderance were decisive, we might at once conclude that all these words went back to Latin forms with ō in the oblique cases, and might explain Spanish fruente, fuente, puente (which should be fronte, fonte, ponte, to represent Latin \bar{o}) as exceptions to the prevailing law of development. A glance at certain facts, however, in Italian and Provençal, suggests another conclusion. We find it to be a regular law in these languages that an original open Latin o (i.e. short o, see § 36. 5), when followed by m, n, or l + another consonant, becomes close. Thus Latin tondet with open o, becomes Italian tonde with close o. respondet becomes risponde; rhombus becomes rombo; pol(y) pus becomes polpo, all with close o. Just what has brought about this change is not certain. D'Ovidio in Gröber's Grundriss der Romanischen Philologie, i. p. 522, thinks it was the analogy of words in on + consonant, om + consonant; and ol + consonant in which close o had developed regularly from an earlier \ddot{u} (see § 36. 5), e.g. rompe (= rumpit); onda (= unda); dolce (= dulcis). accordance with this principle, whose operation is certain, Latin föntem, fröndem, fröntem, möntem, pöntem, would (assuming these to be the original forms) regularly become in Italian: fonte, fronde, fronte, monte, ponte, with close o, exactly as we find them. admission of a long o in the oblique cases of these Latin words is, therefore, not necessary in order to account for Italian and Provençal close o in their Romance descendants. In fact, when we consider Spanish fuente, fruente, puente, all of which point to

Latin \check{o} , it seems more reasonable to regard Spanish monte and fronde (which point to \check{o}) as the exceptions. Gröber, who (Archiv, vi. p. 389) expresses himself in favor of assuming an original fontem, etc., in these words, suggests that Spanish monte, fronde, are loanwords, while fuente, fruente, puente represent an original inheritance.

Briefly, then, a fair interpretation of the evidence of the Romance languages seems to warrant the belief that the oblique cases of the words under discussion came into the Romance languages from the Latin with a (short) open o; that in Italian and Provençal this open o subsequently became close in accordance with a regular law of wide operation. Spanish regularly developed the open o to ue in those words which it inherited from Latin (viz. in fuente, fruente, puente); while Spanish monte and fronde are probably loan-words from Italian.

c) The third bit of evidence comes from Greek transliterations of Latin words as found in Greek inscriptions and Greek authors. Thus we find Φοντήιος (= Fonteius) in Plutarch and Appian; also in an inscription, CIG. iii. 5837, b (59 A.D.); Φροντίνος, CIA. iii. 1154 (between 150 and 200 A.D.); Φροντείνος, CIA. iii. 1177 (about 220 A.D.); Φρόντων, CIA. iii. 1113, 21, 26 (before 161 A.D.), and in texts; all of which point to Latin Fronto, and Frontinus, and indirectly to front-em. Latin Montanus appears as Moντανός, CIG. Addenda, 4805 b; and we find τριμόντιον, Ptol. iii. 11, 12, et passim; πόντεμ (= Latin pontem) is the text in Plutarch, Numa, 9; ποντίφιξ (=pŏntifex), in Dionysius, Dio Cassius, and Zosimus; ποντίφεξ, in Lydus, de Mens. iii. 21; ποντίφικες, in Plutarch, Numa, 9; and ποντίφικα, in an inscription in Kaibel's Sylloge Epigrammatum, Addenda, 888 a. The Greek never shows an ω in any of these words, either in inscriptions or The evidence furnished by that language therefore is in Mss. unanimous in favor of ŏ for the Latin. Nor can recognition be refused the inscriptions above cited on the ground that they are late. As the annexed dates show, they all belong to the good period of the language.

We thus have the strongest possible grounds for writing fontis, frondis, etc. The analogy of other words in -ns (Gen. -ntis) favors this view; the Romance languages favor it, and the testimony of Latin words in Greek dress, as exhibited both in texts and in inscriptions, favors it. In fact the evidence is complete.

The isolated apex in Frónt (for fróntem, as the context shows), CIL. v. 2915, is certainly a mere blunder of the stone-cutter, as is often the case in other words, even in carefully cut inscriptions (see § 36. 3). Christiansen, De Apicibus et I Longis, p. 57, cites thirteen such instances for vowels before nt.

HIDDEN QUANTITY IN DECLENSION.

- **42.** I. It is maintained by some scholars (e.g. Marx, Hülfsbüchlein, p. 2; Lane, Harvard Studies, i. p. 89) that the ending -um in the Genitive Plural of nouns of the First and Second Declensions has \bar{u} in such forms as Aeneadum, deum, nummum; also in nostrum and vestrum. The facts in evidence are the following:
- a) On early Latin coins prior to the First Punic War, we find the final m of many Genitives Plural omitted, e.g. ROMANO, CORANO. Coins of the same date regularly retain final m of the Nominative or Accusative Singular, e.g. Volcanom, Propom (=probum). This has led Mommsen (CIL. i. p. 9) to infer that there was a difference in the quantity of the o in the two instances. As the o of the Nominative and Accusative Singular was short, Mommsen thought that in the Genitive Plural it must be long. But the material with which Mommsen deals is extremely scanty. Genitive Plural forms occur in some number: but only a few Nominative and Accusative forms are found, viz. VOLCANOM, PROPOM. Again, ROMANOM (CIL. i. 1) and AESERNI-NOM (i. 20) show that Genitives sometimes retained the m. Mommsen attempts to solve this difficulty by taking ROMANOM and AESERNINOM as the Nominative Singular Neuter of the Adjective, but that is awkward. The natural inference must be that

there was no system in the omission of final m on these coins. The coins represent no dialect; in fact they represent widely separated localities; hence it is no wonder if the final m (always weak) was sometimes written, sometimes omitted. In the Scipio inscriptions, the oldest of which may date within a quarter of a century of these coins, we find final m freely omitted in the Accusative and Nominative Singular just as elsewhere. It is, therefore, extremely unlikely that Mommsen's hypothesis concerning the coins is correct.

- b) An inscription of Nuceria (CIL, x, 1081) has DVÝMVIRATVS. which Schmitz (Rheinisches Museum, x. 110) and Lane (Harvard Studies, i. p. 89) regard as evidence that the u of duum (Gen. Pl. of duo) was long. But even conceding the correctness of the apex in this isolated instance, it remains to be shown that the duum- of duumvir and duumvirātus is in origin a Genitive. Such an etymology would involve the assumption that the duum- of the Genitive Plural, duumvirum, became transferred to the other cases, replacing duo in earlier duoviri, etc. Such an assumption is extremely improbable. It is much more likely that duumvir and triumvir are formed after the analogy of centumvir. In the singular especially such forms as duovir, trēsvir would have been extremely awkward, and it seems probable that the singular duumvir, triumvir were for that reason historically anterior to duumviri, triumviri. The apex in the Nucerian inscription, if this etymology be correct, would then be simply a blunder of the engraver. as is altogether probable. The evidence in favor of $-\bar{u}m$ in these Genitives must, therefore, be regarded as of no weight, especially in view of the regular shortening of vowels before final -m in Latin. Certainly if $-\bar{u}m$ did by any possibility exist in the days of Augustus, the u had become shortened by 90 A.D. For Quintilian (i. 6. 18), as noted by Lane (p. 90), shows that to his ear nummum, Genitive Plural, was nowise different from nummum, Accusative Singular.
 - 2. Words in -er of the Second Declension, and words of

the Third Declension in -er and -x, have in oblique cases the same quantity of the vowel as in the Nominative, e.g. ăger, ăgrī; frāter, frātris; ācer, ācris; pāx, pācis; tenāx, tenācis; fāx, fācis; rēx, rēgis; nīx, nīvis; cornīx, cornīcis; calīx, calīcis; fel, fellis; ös, ŏssis; plēbs, plēbis. Thus sometimes the Nominative gives the clue to the hidden quantity in the oblique cases (as ăger, ăgrī); sometimes the oblique cases give the clue to the hidden quantity of the Nominative (as cornīcis, cornīx).

- 3. Words of the Third Declension ending in -ns (Gen. -ntis) uniformly have a short vowel in the oblique cases, as already explained in § 40. 3. Greek words in -ās (Gen. -antis), e.g. Aiās, Aiantis; gigās, gigantis, have the same quantity as in the original (Aiās, Aiāvros; γιγās, γίγάντος). So, also, contracted Greek names of cities in -οῦs, -οῦντος, e.g. Selīnūs, Selīnūntis; and proper names in -ῶν, -ῶντος, e.g. Xenophōn, Xenophōntis. Acheron (not a contract form) has Acherūntis.
- 4. In all words of the Third Declension ending in two or more consonants (excepting -ns and -x preceded by a vowel), the hidden vowel before the ending is short, e.g. ŭrbs, sŏrs, ărx. Exceptions to this principle are plebs and compounds of ūncia ending in -ūnx, e.g. deūnx, deūncis; quīncūnx, quīncūncis. Before -x the vowel is sometimes long, sometimes short.

COMPARISON OF ADJECTIVES.

43. In the terminations -issimus, -errimus, -illimus the hidden vowel is short, e.g. carissimus, acerrimus, facillimus. Apparent traces of a long i in the termination -issimus are found in inscriptional forms with i longa. The word of most frequent occurrence is pilssimus; besides this we find a few other words, e.g. CARISSIMO, CIL. vi. 5325; DVLCISSIMO, vi. 16926; FORTISSIMO, vi. 1132. But many of these inscriptions belong to the last centuries of the Empire, when the use of i longa had become an extremely untrustworthy guide, as may be seen by palpable errors. As regards the frequent occurrence of pilssimae, pilssimo, these may

perhaps be explained on the theory that i longa was here used to indicate not merely i, but also the j which developed in pronunciation between the two i's, i.e. pijissimo. Cf the similar use of i longa in words like PompeIivs, CIL. ix. 3748. At all events, in the absence of the apex in these superlatives, and in view of the absolute silence of the grammarians, it seems unwise to attach great weight to the occurrence of the i longa alone. Against \bar{i} Lindsay (Latin Language, p. 405) urges the occurrence of late spellings like MERENTESSEMO, KARESSEMO, CIL. ii. 2997.

NUMERALS.

- 44. As separate words are to be noted
- a) quăttuor, but quartus (see § 53 under arca).
- b) quīnque and its derivatives, all of which have ī, as quindecim, quīntus, quīngentī, quīnquāgintā.
- c) the derivatives of unus, undecim, undeviginti, etc.
- d) mīlle, mīllia, and mīllēsimus.

PRONOUNS.

- 45. 1. Nos, vos; but noster, vester; nostrī, vestrī, etc.
- 2. Hunc and hanc have a short vowel, as shown by the fact that they are sometimes used as short in verse, e.g. Plautus, Mīles Gloriōsus, 1008.
 - 3. Ille, ipse, iste have i.
 - 4. The suffix -cunque has ŭ.
- 5. Compounds retain the quantity of the elements of which they are compounded, as quisquis, cūjūsque.

CONJUGATION.

ROOT FORMS.

46. 1. Presents formed by means of the infix n have a short vowel, e.g. fundo (root fud-); frango (root frag-); jungo (root jug-). Before a labial n becomes m, e.g. rumpo (root rup-);

lambō (root lab-). Care should be taken not to confuse derivative and contract Presents like vēndō, prēndō, with genuine nasal formations.

- 2. In most Presents the hidden vowel is short, e.g. nectō, serpō, vertō. But the following exceptions are to be noted:
 - a) First Conjugation: jūrgō (for jūrigō), nārrō, ōrnō, pūrgō, trāctō.
 - b) Second Conjugation: ārdeō.
 - c) Third Conjugation: compēscō and all Inchoatives (see § 49).
 - d) Fourth Conjugation: nūtrio, ordior.
- 3. The quantity of the vowel in the Present regularly remains unchanged throughout the entire conjugation of the verb, e.g.:

ārdeō	ārdēre	ārsī	ārsūr u s
gerō	gerere	gess ī	gestus
scrībō	scrībere	scrīpsī	scriptus
ขเขอ	vīvere	$v\bar{i}x\bar{i}$	vīctūr u s
figō	figere	fixî	fixus

Thus inscriptions give fixa, scriptum, conscreiptum, vixit, veixit.

But the following exceptions to this general principle are to be noted:

<i>a</i>)	dīcō	dicere	dīx ī	dictus
$d\bar{u}c\bar{o}$	dūcere	$d\bar{u}x\bar{i}$	dŭctus	
	cēdō	cedere	cesse	cĕssūrus

The short vowel of the Perfect Participles dictus and ductus is assured by the statement of Aulus Gellius (Noctes Atticae, ix. 6) and by the testimony of the Romance languages. (See § 52. s.vv.)

b) The short vowel of the Present is lengthened in the Perfect Indicative and Perfect Participle, if hidden, in the following verbs:

agō	agere	ēgī	āctus
cingō	cinger e	cīnx ī	cīnctus
dēlinquō	dēlinq uere	deliq ui	dēlīc tus

distinguõ	distinguere	distinxī	distīnctus
emō	emere	ēmī	ēmptus
exstinguō	exstinguere	exstīn x ī	exstīnctus
fingō	fingere	finxī	fictus
frangō	frangere	frēgī	frāctus
fungor	fungī	functus sum	
jungō	jungere	jūnxī	jūnctus
legō	legere	lēgī	Tectus
pangō	pangere	pepigi	pāc tus
pingō	pingere	pīnxī	pīctus
pungō	pungere	pupugī	pūnctus
regō	regere	rēxī	rēctus
relinquō	relinquere	reliqu <mark>i</mark>	relictus
sanciō	sancire	sānxī (?)	sā n ct us
struō	struere	strūxī	strūct us
tangō	tangere	tetig ī	<i>tāctus</i>
tegō	tegere	tēxī	tēctus
tinguō	tinguere	tīnxī	tīnctus
trahō	trahere	trāxī	trāctus
ungō	ungere	ūnxī	ūnctus

So also in compounds and derivatives of these verbs.

- 4. The evidence for the long vowel in the Perfect Participles of the foregoing list is found:
- a) In the statements of Gellius, who testifies (*Noctes Atticae*, ix. 6) to the quantity of the vowels of $\bar{a}ctus$, $\bar{t}ectus$, $\bar{u}nctus$, and in xii. 3. 4 to that of $str\bar{u}ctus$.
- b) In the testimony of inscriptions, which show the following: ÁCTIS CIL. vi. 1377; REDÁCTA vi. 701; EXÁCTVS BOISSIEU, Inscriptions de Lyon, p. 136; CINCTVS CIL. x. 4104; DÉFÉNCTIS CIL. v. 1326; DILÉCTVS vi. 6319; LÉCTVS xi. 1826; EXSTINCTOS vi. 25617; INFRÁCTÁ ix. 60; IÚNCTA x. 1888; SEIÚNCTVM vi. 1527 e. 38; RÉCTE xii. 2494; TÉCTOR vi. 5205; COÉMTO Monumentum Ancyranum iii. 11; TRÁ[CTA (not certain) CIL. vi. 1527 e. 14; SÁNCTA v. 2681; Oscan SAA(N) HTOM (= sānctom).
- c) In the retention of a in compounds of actus, tactus, fractus, pactus, tractus (e.g. coactus, attactus, refractus, etc.), which shows

that the a was long; short a would have become e in this situation, as for example in $c\bar{o}nfectus$ for an original $*c\bar{o}nf\bar{a}ctus$; acceptus for an original $*acc\bar{a}ptus$; $\bar{e}reptus$ for $*\bar{e}r\bar{a}ptus$.

- d) For cinctus, delictus, distinctus, exstinctus, fictus, pictus, pūnctus, relictus, tinctus, the long vowel is assured by the evidence of the Romance, e.g. Italian cinto, delitto, fitto, relitto, tinto.
- 5. The evidence for the quantity of the vowel in the Perfects of the foregoing list is found:
- a) In inscriptional markings, as CONIVNXIT (Wilmanns, Inscript. Latinae 104); TÉXIT (CIL. x. 1793); RÉXIT (CIL. v. 875); TRÁXI (CIL. x. 2311, 18).
- b) In Priscian's statement (Keil, ii. 466) that rexi and texi have \bar{c} .
- c) In the testimony of the Romance languages which point to $c\bar{\imath}nx\bar{\imath}$, $dist\bar{\imath}nx\bar{\imath}$, $exstinx\bar{\imath}$, $f\bar{\imath}nx\bar{\imath}$, $p\bar{\imath}nx\bar{\imath}$, $str\bar{\imath}ux\bar{\imath}$, $t\bar{\imath}nx\bar{\imath}$, $t\bar{\imath}nx\bar{\imath}$.
- d) The long \bar{a} in $s\bar{a}nx\bar{i}$ rests upon no specific evidence, but may perhaps be safely inferred after the analogy of $s\bar{a}$ nctus.

Until recently the principle was maintained (e.g. by Marx in his first edition) that all monosyllabic stems ending in b, d, or g, had the hidden vowel long in the Perfect Indicative and Perfect Participle wherever euphonic changes occurred. According to this theory we should have e.g. scindō, scindere, scidī, scīssus; mērgo, mērgere, mērsū, mērsus. This principle was first laid down by Lachmann (on Lucretius i. 805) for Perfect Participles alone, and was subsequently assumed by other scholars to apply to the Perfect Indicative as well; but this position is now entirely abandoned. Each long vowel must be supported by specific evidence.

VERBAL ENDINGS.

47. 1. The hidden vowel is short before ss and st in the terminations of inflected forms, e.g. fuissem, amāvisse; fuisti, fuistis. This is shown not only by the historical origin of these formations, but by such metrical usage as Plautus, Amphitruo, 761, dedisse; Menaechmi, 687, dedissi, where iss and ist are treated as short

syllables by neglect of 'position' (see § 36. 2). Contracted forms are, of course, an exception to the above principle, as amāsse, commōssem, redīsse, audīsset, amāsti, nōstis.

2. Formations of the type: dīxfi, accestis, jūsfi, trāxe, surrēxe, exfinxem have the same quantity as the regular forms.

COMPOUNDS.

48. Marx (p. 8) holds that the vowel of a monosyllabic preposition, if hidden, is long in composition when the preposition loses a final consonant. Thus he maintains a long vowel for the initial syllable of $ascend\bar{o}$ (for *ad- $scand\bar{o}$); di- $stingu\bar{o}$ (*dis- $stingu\bar{o}$); $suspici\bar{o}$ (for *sub- $spici\bar{o}$). But this principle rests upon an untenable theory of compensatory lengthening; see § 89.

INCHOATIVES.

49. Inchoatives in $-sc\bar{o}$, -scor have a long vowel before -sc, e.g. $lab\bar{a}sc\bar{o}$, $fl\bar{o}r\bar{e}sc\bar{o}$, $nit\bar{e}sc\bar{o}$, $trem\bar{i}sc\bar{o}$, adipiscor. Gellius (Noctes Atticae, vi. 15) mentions a number of words of this class as having a long vowel, and implies that this was generally true of all. The Romance languages show that $-esc\bar{o}$ and $-isc\bar{o}$ (-iscor) had \bar{e} and \bar{i} .

IRREGULAR VERBS.

- 50. 1. The root vowel of esse is short under all circumstances, e.g. ĕst, ĕstis, ĕstō, ĕssem.
- 2. Edō, 'eat,' has a long e in the forms ēs, ēst, ēstis, ēssem, ēsse, ēstur, ēssētur. Cf. Donatus on Terence, Andria, i. 1. 54; Servius on Vergil, Aeneid, v. 785.
- 3. Marx (p. 9) lays down the principle that in compounds of $e\bar{o}$, forms containing ii have the second i long before st, as e.g. in interiistā. This theory rests solely upon the occurrence of interiesti in CIL. i. 1202. But EI occurs elsewhere in inscriptions, incorrectly written for i, e.g. parenteis (= parentis), CIL. i. 1009; faceivndae (= faciundae). It is altogether probable that interiesti is another instance of the same sort.

WORD FORMATION.

- 51. 1. Substantives in -abrum, -acrum, -atrum, derived from verbs, have \bar{a} , e.g. flabrum, lavacrum, aratrum.
- 2. The derivative endings -ellus (a, um), -illus (a, um), regularly have \check{e} and \check{i} , but the following have a long vowel, viz.: cafella, 'little chain,' anguilla, Bovillae, hillae, ovillus, stilla, suillus, villa.
- 3. The vowel is short in -ernus (-ernius, -ernīnus), -urnus (-urnius, -urnīnus), e.g. hibērnus, tabērna, Satūrnus. In vērnus (from $v\bar{e}r$) the r is not a part of the suffix.
- 4. The vowel is short in the endings -estus (-ester, -estris, -esticus, -estās), -ister (-istrum), -ustus, e.g. caelestis, domesticus, tempestās, capistrum, venustus. In sēmestris, jūstus, the long vowel belongs to the stem.
- 5. The vowel is short in the endings -unculus, -unciō, -erculus, -usculus, e.g. ratiuncula, paterculus, mājusculus, homunciō; plūsculus (from $pl\bar{u}s$) naturally has \bar{u} .
- 6. In compounds, the connecting vowel i is short, e.g. nāvi-fragus, lectisternium.

LIST OF THE MOST IMPORTANT WORDS CONTAINING A LONG VOWEL BEFORE TWO CONSONANTS.¹

52.

A

abiēgnus: see § 38. acatalēctus: Gr. dκατάληκτος. āctūtum: like āctus.

agō, agere, ēgī, āctus: see § 46. 3. b). | ambūstus: see ūrō.

Alcēstis: Gr. "Αλκηστις. Ālēctō: Gr. 'Αληκτώ. aliōrsum: for *alio-vorsum. aliptēs: Gr. dλείπτης. Αmāzōn: Gr. 'Αμάζων.

ana amista d Cama this list.

- 1 The following classes of words are omitted from this list:
- a) Most derivatives and compounds.
- b) All words containing ns or nf.
- c) Inchoatives in -asco, -esco, -isco.
- a) Some rare Greek loan-words and proper names.
- e) Nouns and adjectives in -x, whose Genitive (acc. to § 42. 2) shows the preceding vowel to be long.

anguilla: i acc. to the Romance.

aprūgnus: see § 38.

Aquillius: AQVILLIVS: CIL. vi.

12264.

arātrum: see § 51. 1.

ā dē : like āridus.

ā hla: Gr. āθλον.

ā hlētes: Gr. āθλητήs.

ā rāmentum: like āter.

ā rium: from āter; also ΔTRIVM,

CIL. vi. 10025.

В.

dxilla: Priscian, iii. 36.

dārdus, 'stupid': from bāro. Bedriacum: Βητριακόν, Plutarch. Otho. 8, 11. . Bellerophon, -ontis: Gr. -wv, - wros. Venignus: see § 38; so also the Romance. bestia, Bestia: Byorlas; Plutarch. Marius, 9; Cicero, 3; the Romance would point to č. bimēstris: from mēnsis. bovillus: from bovinus. būbrēstis: Gr. βούβρηστις. $b\bar{u}rrus: \bar{u}$ acc. to the Romance. $b\bar{u}stum: \bar{u}$ acc. to the Romance; cf. combustus and ustus.

C.

catella: from catena; catella, 'bitch,'

catalectus: Gr. κατάληκτος.

has ž

catillus: from catinus.
cētra: better orthography is caetra;
see § 61.
chīrūrgus: Gr. χειρουργόs.
cicātrīx: ā in Plautus, Amphitruo
446; see § 36. 2.
cīccus, -um: ī acc. to the Romance.
Cīncius: CINCIA, CIL. vi. 14817 et
passim.

cingo, cingere, cinxi, cinctus: i in the Perfect and Perfect Participle acc. to the Romance; see Körting (Wörterbuch, col. 196); d'Ovidio (Gröber's Grundriss, p. i. 501 f.); CINCTVS, CIL. x. 4104; see § 53. s. v. clātra, clātrī: Gr. κλήθρα. Clytemēstra: Gr. Κλυταιμήστρα. Cnössus: Gr. Kvwooós. cogo, cogere, coegi, coactus: see ago. comburo, comburere, combussi, combustus: see uro and bustum. como, comere, compsi, comptus: o acc. to the Romance. compingo, compingere, compegi, compāctus: see § 46. 3. b). conjunx: CONIVNX, CIL. vi. 6592 et passim; but conjux has ŭ. contingo, -ere, contigi, contactus: like contio: for co-ventio; § 40. 2. a). corolla: from corona. crābro: ā in Plautus, Amphitruo, 707; see § 36. 2. crāstinus: from crās. crēsco: créscéns, CIL. xii. 4030 et passim; Gr. Κρήσκηνς; also acc. to the Romance. cribrum: i in Plautus, Mostellaria, 55; see § 36. 2. crispus: CREISPINVS, CIL. x. 3514. Κρεισπείνον, CIG. Addenda, 4342, d. 4. The Romance would point to i; but see § 36. 5 fin. crūsta, crūstum: V in CIL. i. 1199; the Romance points both to crustum and also to a collateral form with ŭ. Gröber (Archiv, vi. 384); Körting (Wörterbuch, col. 232). Ctesiphon, -ontis: Gr. - ŵv, - ŵvros. cucullus, 'hood': the Romance points to two forms, — one with \bar{u} , an-

other with u; see Gröber (Archiv,

buch, col. 233); cucullus, 'cuckoo,' has ŭ.

cunctus: cvncti, CIL. ix. 60. cūstos: Κουστώδης, Lydus, de Magistratibus, i. 46; u acc. to the Ro-

mance.

Cyclops: Gr. Κύκλωψ.

D.

đeligo, -ere, đelegi, đelectus: like lego. delinquo, -ere, deliqui, delictus: i acc. to the Romance.

delubrum: ū in Plautus, Poenulus, 1175; see § 36. 2.

demo, demere, dempsi, demptus: like emō.

deunx: from de and uncia.

dextans: from de + sextans.

dico, dicere, dixi, dictus: see § 46. 3.a). Certain of the Romance languages (Fr. dit; Old Ital. ditto, etc.) point to a collateral dictus, which Osthoff (Morphologische Untersuchungen, iv. 74) thinks belonged to the colloquial language. But possibly those Romance languages which point to i have simply adapted the Participle to the vowel of the Present and the Perfect. See Gröber (Archiv, vi. 385). dicterium : Gr. δεικτήριον.

Diespiter: dies and pater.

digladior: for dis + gladior by compensatory lengthening; see § 89.

dignus: see § 38 fin.

digredior: for dis + gradior by compensatory lengthening; see § 89.

dilemma: Gr. διλημμα.

dīligō, -ere, dīlēxī, dīlēctus: like legō. dirigo, -ere, direxi, directus : like rego. dirimo, -ere, diremi, diremptus: like emō.

i. 555; vi. 384); Körting (Wörter- | distinguō, -ere, distinxī, distinctus : ? acc. to the Romance; see d'Ovidio (Gröber's Grundriss, i. p. 502); Körting (Wörterbuch, col. 304); cf. exstinguo; see 46. 3. b.

dolābra : cf. § 51. 1.

dūco, dūcere, dūxī, dŭctus: see § 46. 3. a); PERDÝXIT, CIL. xii. 2346 et passim.

E.

ēbrius : ē regularly in Plautus, e.g. Trinummus, 812; see § 36. 2. eclipsis: Gr. Exxentis.

effringo, -ere, effregi, effractus: like frangō.

emo, emere, ēmi, ēmptus: see § 46. 3. 6).

ēmungo, -ere, ----, ēmunctus: u acc. to the Romance; see d'Ovidio (Gröber's Grundriss, i. p. 515). ērigō, -ere, ērēxī, ērēctus: like regō.

ēsca: ē acc. to the Romance.

 \overline{E} squiliae, \overline{E} squil \overline{i} nus : Gr. \overline{H} σ κυ λ \widehat{i} ros, in Strabo, v. 234, 237.

Etrūscus: cf. Etrūria; Gr. Ἐτροῦσκος. existimo: from ex and aestimo; EXI-STIMAVERVNT, CIL. v. 5050.

exordium: from ordior.

exstinguo, -ere, exstinxi, exstinctus: EXTINCTOS, CIL. vi. 25617; cf. distinguo; see 46. 3. b. extraordinarius: from ordo.

F.

favilla: FAVILLA, CIL. v. 3143. The Romance also seems to point to i. fello: from same root as femina; Gr. θηλυς.

festīvus: from festus.

festus: from the same root as feriae (= *fes-iae), 'holiday'; FESTVS in CIL. i., Fasti Praenestini for April 25th. So also in the proper name:

Festus: Festvs, CIL. xii. 3179; Festi, | furtum from fur. v. 2627; FESTAE, iii. 5353; Gr. $\Phi \hat{\eta} \sigma \tau os$, CIA. iii. 635 and frequently. The Romance points to ě, indicating that ē of the classical period ultimately became reduced; see § 36. 5. figo, figere, fixi, fixus : FIXA, Monumentum Ancyranum, vi. 18; i acc. to the Romance. fingo, fingere, finxi, fictus: i acc. to the Romance; see § 53 s. v. firmus: FIRMVM, CIL. iv. 175 et passim: the Romance points to i, showing that i of the classical period had become reduced; see § 36. 5. flabrum : see § 51. 1. fligo, -ere, -flixi, -flictus: AFLEICTA, CIL. i. 1175; the Romance also points to 2. flosculus: from flos. forma: see Donatus on Terence, Phormio, 28; φώρμη in Greek inscriptions; Romance also shows o. formula: from forma. frango, -ere, fregi, fractus: see § 46. frigo, -ere, -, frictus: i acc. to the Romance. fructus: \vec{u} acc. to the Romance. Old French froit points to a collateral fructus; see Osthoff, Geschichte des Perfects, p. 523. fruor, frui, fructus sum: u acc. to the Romance. frūstrā: FRÝSTRÁ, CIL. vi. 20370. frustum: \bar{u} acc. to the Romance. fungor, fungi, functus sum: DE-FÚNCTIS, CIL. v. 1326; FÚNCTO, xii. 3176 et passim.

furtim: from fur. furtivus: from fur.

fustis: \vec{u} acc. to the Romance. G. geographia: Gr. γεωγραφία. Georgius: Gr. Γεώργιος. georgicus: Gr. γεωργικός. glisco: \$ 49. glossarium: from Gr. γλωσσα. glossema: from Gr. γλωσσημα. $gr\bar{y}llus: \bar{y}$ acc. to the Romance. gryps: like Gen. grypis; § 42. 2. H. hāctenus: like hāc. Hellespontus: Gr. 'Ελλήσποντος. Herculanum: HERCVLANIAE, CIL. xii. 1357; Ἡρκουλάνεον, Dio Cassius, lxvi. 23; 'Ηρκλανός, CIA. iii. 1197. hibiscum: i acc. to the Romance. hillae: from hira.

hircus: like hirtus. hīrsūtus: like hīrtus. Hirtus and hirtus: i acc. to the Romance. hīscō: see § 49.

Hispellum: cf. Gr. Eloπέλλον, Strabo, v. 227. Hīspo, Hīspulla: like Hīspellum.

hornus: from hora? horsum: for *ho-vorsum.

hydrops: like Gen. hydropis; § 42. 2. Hymēttus: Gr. Υμηττός.

Hypermestra: Gr. Υπερμήστρα.

I.

ignis: IGNIS, CIL. xi. 826. ilignus: see § 38. illorsum: for *illo-vorsum. Illyria: EILLVRICO, CIL. i2. p. 77. impingo, -ere, impēgi, impāctus: see § 46. 3. b).

infestus: INFESTI, CIL. v. 2627; cf. | lavabrum: see § 51. 1. manifestus. inlustris: from lux. Iolcus: Gr. 'Ιωλκόs. īnstīnctus: see distinguo. intellego, intellegere, intellexi, intellectus: like lego. intervallum : from vallus. introrsum: for *intro-vorsum. involucrum: ū in Plautus, Captivi, 267; § 36. 2. istorsum: for *isto-vorsum.

T.

jentaculum: see § 40. 2. a). jentatio: see § 40. 2. a). juglans: from Jov- and glans. jungo, -ere, jūnxī, jūnctus; see § 46. 3.6). jūrgo: for jūrigo, from jūs. Jūstiniānus: from jūstus. jūstitium: from jūs. jūstus: from jūs: also IVSTO, CIL. ii. 210; v. 5919. jūxtā, jūxtim: from jūgis 'joined with.'

labor, labi, lapsus sum: see § 46. 3; DILÁPSAM, CIL. xi. 3123. lābrum, 'bowl': for lavābrum; labrum, 'lip,' has ă. labrūsca: \bar{u} acc. to the Romance. laevorsum: for *laevo-vorsum. lāmna: syncopated for lāmina. lardum: syncopated for laridum. Lārs, Lārtis: LÁRT-, CIL. x. 633. larva: like larua, the early Latin form, e.g. Plautus, Amphitruo, 777; Captivi 598. lātrīna: for lavātrīna; cf. Plautus, Curculio, 580; § 36. 2. latro: a in oblatratricem, Plautus, Miles Gloriosus, 681; § 36. 2.

lavācrum: see § 51. 1. lego, -ere, legi, lectus: see § 46. 3. lemma: Gr. λημμα. Temniscus: Gr. λημνίσκος. Lemnos: Gr. Anupos. lentiscus: i acc. to the Romance. libra: i in Plautus, Pseudolus, 816; § 36. 2. libro: like libra. hctor: LICTOR, CIL. vi. 699 and often;

LICTOR, Ephemeris Epigraphica, v. 51; λείκτωρ, Eckinger (Orthographie lateinischer Wörter in Griechischen Inschriften, p. 43).

lignum: see § 38. lubricus: u in Plautus, Miles Gloriosus, 853; § 36. 2. lūceo, -ēre, lūxī: see § 46. 3. $l\bar{u}cta$: \bar{u} acc. to the Romance. luctor: like lucta.

lūctus: from lūgeo: also Lýctvm, CIL. vi. 1527 e. 66; LÝCTV, CIL. v. 337; x. 4041. 2.

lugeo, lugere, luxi: see § 46. 3. lūstrum, 'expiation': LVSTRVM, Monumentum Ancyranum, ii. 3, 5, 8; ii. 3, 6, 10; lustrum, 'haunt,' has ŭ. lūstro: like lūstrum. lūxuria: see lūxus.

 $l\bar{u}xus: \bar{u}$ acc. to the Romance.

Lycurgus: Gr. Λυκοῦργος.

māgnus: see § 38.

M.

malignus: see § 38; so also the Romance. malle: for *mah- (magis) + velle. manifestus: [MANI]FÉSTVM, CIL. i. p. 319; very uncertain. Manlius: from Manius; MANLIO, Mánlia, CIL. v. 615; Mánliar, ix. 3942.

Marcellus, Marcella: from Marcus; | narro: NARREM, Boissieu, Inscrip-MARCELLA, CIL. xii. 3188. Marcius: from Marcus; MARCIVS, CIL. v. 555 et passim; Máapkiov, CIG. 1137. Marcus: MAARCO, CIL. i. 1006; xiv. 2802; MARCI, Boissieu, Inscriptions de Lyon, p. 143; Máapkos, CIG. 887 et passim. Mars, Martis: MARTIS, Monumentum Ancyranum, iv. 21; CIL. x. 809 et bassim. Mārtiālis: like Mārs. māssa : Gr. μάζα. matrimonium: from mater. mātrīx: from māter. mātrona: from māter; MATRONA, CIL. v. 5249. māxilla: acc. to Priscian, iii. 36. māximus: MAX[IMO, CIL. vi. 2080. 17. māza: Gr. μαζα. mercennarius: for *merced-narius. Mētrodorus: Gr. Μητρόδωρος. mētropolis: Gr. μητρόπολις. mille, millia: MILLIA, Monumentum Ancyranum, i. 16: MILLIENS, iii. 34; i acc. to the Romance. milvus: as in the early Latin miluos. Mostellaria: from monstrum. mūcro: ū in Atta, Frag. 13 (ed. Ribbeck); § 36. 2. mulleus: u acc. to the Romance. mullus: u acc. to the Romance. mūscerda: from mūs. mūsculus: from mūs.

N.

nanciscor : see § 49. Narnia: Umbrian Nahar- $(=\bar{a})$.

mūscus: ū acc. to the Romance.

Mycalessus: Gr. Μυκαλησσός.

mūstēla: from mūs.

tions de Lyon, p. 136. nāscor: § 49; NASCERER, Monumentum Ancyranum, ii. 44; NASCENTI-BVS, CIL. xii. 3702. nāsturcium: from nāsus. nefastus: from nefas. neglego, -ere, neglexi, neglectus; see legō. nequidquam (nequicquam): from abl. nītor, nītī, nīxus sum : see § 46. 3. $n\bar{o}lle$: from ne + *volle (through the assimilated form *no-volle?). nondum: from non and dum; NON-DVM, CIL. x. 4041. 6. nongenti: for *no(v)engenti. nonne: from non. nonnulli: from non and nullus. Norba: Gr. Νώρβη. nosco: o acc. to the Romance. nūbo, -ere, nūpsī, nūpta: see § 46. 3. nullus: from ne and ullus; NVLLVM, CIL. x. 4787. nundinae, nundinum: for *no(v)endinae; noundinae in early Latin; NVNDINVS, CIL. xii. 3650. nuntius: for *nove-ntius? ('newsbringer'). nūntio: like nūntius. nūptiae: like nūpta. nūsquam: like ūsquam. nūtrio: like nūtrīx. nūtrīx: ū in Plautus, Curculio, 643; nūtrīcātus, Miles Gloriosus, 656; nūtrīcant, Miles Gloriosus, 715; § 36. 2. 0. obliviscor: see § 49; OBLIVISCEMVR, CIL. vi. 6250.

et passim.

Oenotria: Gr. Οινωτρία.

olla: for aula; ólla, CIL. vi. 10006

Onchestus: Gr. "Ογχηστος. Opūs. - untis : Gr. 'Οποῦντος. orca: o acc. to the Romance. ōrdior: like ōrdō. ordo: ÓRDINIS, Boissieu, Inscriptions de Lyon, p. 136; CIL. ix. 5177; xii. 3312; \bar{o} acc. to the Romance. örnö: GRNARE, CIL. xii. 4333 et passim. ornāmentum: órnámentis, CIL. xii. 3203 et passim; cf. orno. öscen: from ös. ōscillum: from ōsculum. ōscitō: from ōs. osculor: from os. Ōstia: from os; Gr. 'Ωστla. ōstium: from ōs; ωστια, scholion to Aristophanes, Plutus, 330; ÓSTIVM, CIL. vi. 4710; ÓSTIÓ, Monumentum Ancyranum, v. 14. ovillus: from ovinus. Oxus: Gr. 2Ωξos, in Strabo.

paciscor, pacisci, pactus sum: see Paelignus: see § 38; Gr. Hailîvoi in Appian, B.C. i. 39. palimpsēstus: Gr. παλίμψηστος. palūster: from palūs. pango, pangere, pepigi, pactus: the compounds impactus, compactus, point to \bar{a} ; see § 46. 4. c). paradigma: Gr. παράδειγμα. pāsco, pāscere, pāvī, pāstus: see § 49. pāstillus: like pāsco. pāstio: like pāstus. pāstor: like pāstus; PAASTORES, CIL. i. 551; PÁSTÓRIS, CIL. x. 827. pāxillus: acc. to Priscian, iii. 36. ρέςma: Gr. πηγμα. pentathlum : Gr. αθλον. peremptalis: from peremptus (emo).

pergo, pergere, perrexi, perrectus: like regō. periclitor: like periculum. perimo, -ere, peremi, peremptus: like Permēssus: Gr. Περμησσός. perrepto: from repto (repo). Pessinus, -untis: Gr. Πεσσινοθντος. Phoenīssa: like Phoenīx. pictor: like pictus (pingo). pictura: like pictus. pigmentum: PIGMENT-, CIL. viii. 1344; i acc. to the Romance. pignus: see § 38. pingo, pingere, pinxi, pictus: see under fingo, which is precisely parallel. pīstillum, pīstor, pīstus (from pīnsō), pīstrīnum, pīstrīlla: PISTVS, CIL. v. 6998. The Romance evidence is conflicting, but is favorable to ī. plebiscitum: = plebi scitum, and better so written. plebs: like genitive plebis; PLEPS, CIL. v. 6797; xii. 4333. plectrum : Gr. πληκτρον. Plīsthenēs : Gr. Πλεισθένης. plostellum: from plaustrum. plūsculum: from plūs. poētria, -is: Gr. ποιητρία, ποιητρίς. Polla: = Paulla; Polla, CIL. xii. 3471; cf. the following word. Pollio: from Paullus; Pollio, CIL. vi. 22840 et passim; Πωλλίων in Plutarch, Dio Cassius, and elsewhere. pollūceo, -ēre, -ūxī: § 46. 3. Polymestor: Gr. Πολυμήστωρ. porrigo, -ere, porrexi, porrectus: like regō. praelūstris: like lūx. pragmaticus: Gr. πράγματικός. Prāxiteles: Gr. Πράξιτέλης (πράξις). prendo: for pre-hendo.

primordium: from ordior. purgamentum: from purgo. princeps: from primus and capio. pūrgātiō: from pūrgō. pūstula: from pūs; ū acc. to the Roprincipalis: from princeps. principatus: from princeps. mance. principium: from princeps. Prīsciānus: from prīscus. Q. priscus and Priscus: PRÍSCVS, CIL. quārtus: QUARTVS, CIL. iii. 4959; xi. 1940; PrIscvs, CIL. ix. 4354. c; Monumentum Ancyranum, iii, 22 Πρείσκος, CIG. 4494 et passim. pristinus: like priscus. et passim. prīvīgnus : see § 38. quartanus: like quartus. procrastino: from cras. quārtārius: like quārtus. quiesco: acc. to Gellius, Noctes Atticae, . Procrūstes: Gr. Προκρούστης. profestus: from festus. vii. 15, some persons pronounced promo, -ere, prompsi, promptus: see quiesco in his day; but other -sco formations have invariably \bar{e} before propugnāculum: pugno. se; quievi and quietus also point to prorsum, prorsus: for *pro-vorsum, quiesco; QVIÉSCERE is found CIL. vi. 25531. prosperus: from pro *spere? ('accordquincunx: from quinque and uncia. ing to expectation'). quindecim: from quinque and decem; prostibulum: from pro and stabulum. ī acc. to the Romance. Pūblicius, Pūblicola: from pūblicus. quingenti, quingeni, quingenties: from Poplicola is another word, viz. from quinque. poplus, early form of populus, Quinquatrus: from quinque; a in 'people.' Plautus, Miles Gloriosus, 691; publicus: from pubes; PVBLICOR[VM, § 36. 2. CIL. vi. 1377; ū in Plautus, Miles quinque: QVINQVE, CIL. vi. 3539 et Gloriosus, 102, 103; Captivi, 334 et passim; i acc. to the Romance. passim; § 36. 2; \vec{u} also acc. to the quinquaginta: from quinque. Romance. quinquennium: from quinque. Publilius: like Publius. quinquies: from quinque. Pūblius: like pūblicus. quintāna: from quintus. Quintilis: from quintus. pūgna: see § 38. Quintilius: from quintus; QvInctipūgnāx: like pūgna. pūgno: like pūgna. LIO, CIL. iii. 384. quintus, Quintus, Quinctius: from pūgnus: see § 38. pulvillus: from pulvinus; PVLVILLVS, quinque; QVINTVM, Monumentum CIL. i. Fasti Cap., a. 297. Ancyranum, iii. I; i longa occurs pungo, -ere, pupugi, punctus: ū acc. to repeatedly; Kóeivtos, CIG. 2003; the Romance. ī acc. to the Romance.

quippe: for quid (Abl.) and -pe. quorsus: for *quo-vorsus.

pūrgō: for *pūrigō (pūrus); ū also

acc. to the Romance,

R.

 $r\bar{a}strum$: from $r\bar{a}d\bar{o}$.

rēāpse: for rē eāpse (Abl. of ipsa).

rēctē, rēctor : like rēctus.

rēctus: see regō.
redigō, -ere, redēgī, redāctus: like agō.
redimō, -ere, redēmī, redēmptus: like

emō; 'Ρεδηνπτα, CIG. 9811; RE-DÉMPTA, CIL. vi. 22251.

redemptio, redemptor: from redimo.

rēgnum: see § 38.

rēgnō: like rēgnum.

rēgnātor, rēgnātrīx: from rēgnō. rego,-ere, rēxī, rēctus: see § 46. 3. b).

relinquo, -ere, reliqui, relictus: see § 46. 3. b).

reminīscor, -ī: see § 49.

rēpo, rēpere, rēpsī, rēptum : see § 46. 3. restinguo, -ere, restinxī, restinctus : see

estinguo,-ere, restinat, restinctus : se distinguō.

rīxa: ī acc. to the Romance.

roscidus: from ros.

Roscius: Roscio, CIL. vi. 2060, 5;

'Pώσκιος, Plutarch, Cicero, 3; 5; Pompey, 15.

rostrum: from rodo; ρωστρον, Hesvchius.

Rostra: from rostrum.

Roxana: Gr. 'Ρωξάνη.

rūcto: acc. to the Romance (Gröber,

Archiv, v. p. 370).

rūrsus: for *re-vorsus.

rūsticus: from rūs; Rýsticvs, CIL. ix. 4012; ū acc. to the Romance.

S.

salīgnus, salīgneus: see § 38. sancīō, sancīre, sānxī, sānctus: see § 46. 3. b).

Sārsina: SASSINAS in an inscription. scēptrum: Gr. σκηπτρον.

scīscō: see § 49; D[ESC]ISCENTEM, Monumentum Ancyranum, v. 28.

scrībō, -ere, scrīpsī, scrīptus: see § 46.
3; SCRIPTVM, CIL. vi. 2011: CON-

SCREIPTVM, CIL. vi. 2011; CONSCREIPTVM, CIL. i. 206. 87; 109; CÓNSCRÍPTIS, CIL. x. 3903; i acc.

to the Romance; Umbrian screihtor = scriptos (Nom. Plu.).

sēgmen: like sēgmentum.

sēgmentum: see § 39.

sēgnis: ségnis in a Herculanean papyrus.

sēligō, sēligere, sēlēgī, sēlēctus: like legō.

Selīnūs, -ūntis: Gr. Σελινοῦντος. sēmēstris: for *ses-mēstris, *sexmēstris;

see § 89. sēmūncia: from sēmi- and ūncia.

septūnx: from ūncia.

sescuncia: for sesqui- and uncia.

sēscuplex, sēscuplus: for sēsqui- and -plex.

Sesostris: Σέσωστρις.

sēsqui-:= sēmisque-.

sēstertius: for sēmis tertius.

Sēstius: Gr. Σήστωs, in Cic. ad Att. vii. 17. 2 et passim; Σηστία, CIA. iii. 1450.

Sestos, Sestii : Gr. Σηστός, Σήστιοι.

Sīgnia: SEIG[NIA, CIL. i. 11.

signum: SEIGNVM, CIL. xiv. 4270; SIGNA, Boissieu, Inscriptions de

Lyon, p. 606; cf. § 38 fin. sīgnifico, sīgno: like sīgnum.

sinistrorsus: for *sinistro-vorsus.

sīstrum : Gr. σείστρον.

sobrius: o in Plautus, Miles Gloriosus,

812; § 36. 2. Socrates: Gr. Σωκράτης.

sölstitium: from söl.

Sophron: Gr. Σώφρων.

sospes: Gr. Σωσπις, CIA. iii. 1161 et passim.

sospita, sospito: like sospes. stāgno : like stāgnum. stagnum: see § 38. stilla: i acc. to the Romance. stīllicidium, stīllo: like stīlla. struo, -ere, struxi, structus: see § 46. 3. b); \vec{u} also acc. to the Romance. structor: like structus; cf. STRVCTOR, CIL. x. 708; \bar{u} acc. to Gellius, xii. 3.4. structura: like structus. sublustris: like lux. substructio: like structus. suesco: as in suevi, suetus. sūgō, -ere, sūxī, sūctus: see § 46. 3; \bar{u} acc. to the Romance. suillus: from suinus. sūmō, -ere, sūmpsī, sūmptus: see § 46. 3; \bar{u} also acc. to the Romance. sumptus: from sumo. sūrculus: from sūrus. surgo, -ere, surrexi, surrectus: like rego. sursum . for *su-vorsum. sūtrīna: like sūtor. Sūtrium: ū in Plautus, Casina 524;

т

§ 36. 2.

syllepsis: Gr. σύλληψις.

tangō, -ere, tetigō, tāctus: see § 46. 3. b).
tāctiō: like tāctus.
Tartēssus: Gr. Ταρτησσόs.
tāxillus: acc. to Priscian, iii. 36.
Tecmēssa: Gr. Τέκμησσα.
tēctum: from tegō.
tegō, -ere, tēxī, tēctus: see § 46. 3. b).
Telmēssus: Gr. Τελμησσόs.
Tēmnos: Gr. Τημνόs.
Termēssus: Gr. Τερμησσόs.
terūncius: from ūncia.
theātrum: Gr. θέāτρον.
tignum: see § 38.

Tillius: TILLIVS, CIL. vi. 2043. tingo,-ere, tinxi, tinctus: see § 46. 3. b). trāctim: like trāctus. trācto: like trāctus. traho, -ere, traxi, tractus: see § 46. 3. b). Trapezus, -untis: Gr. Τραπεζούs, -oûvtos. triformis: from forma. tristis: TRISTIOR, CIG. 6268; i also acc. to the Romance. tructa: u acc. to the Romance. IJ. ullus: from unus; VLLA, CIL. ii. 1473; VLLI, CIL. vi. 10230. ūlna: Gr. ώλένη. ūlva: like ūlīgō. *ūncia* : like *ūnus*. ūnctiō: like ūnctus (ungō). undecim, undecimus: from unus and decem. undeviginti, etc.: like unus. ungo, -ere, unxi, unctus: see § 46. 3. 6). uro, -ere, ussi, ustus: u in the Perfect Participle acc. to the Romance; for the ŭ in ussī, see § 53 s. v. ūspiam: like ūsque. ūsquam: like ūsque. \bar{u} sque: \bar{u} acc. to the Romance. ūstrīna: like ūstus. ūsūrpo: ūsū rapio?

V. vāllum, vāllus: VALLARI, CIL. ii.

4509; also VALLIVS, VALLIA, CIL. xiv. 4039. vāllāris: see vāllum. vāllō: see vāllum. vāsculum: like vās. vāstus: the Teutonic languages point to a long root vowel.

Vēctis, 'Isle of Wight': Gr. Οὐηκτίs. vēgrandis: from vē- and grandis.

Vēlābrum: ā in Plautus, Curculio, 483; § 36. 2.

vēndo: from vēnum and do.

vērnus: from vēr.

vēstibulum: vē- + stabulum? Cf. prōstibulum,

vēstīgium: vē + steigh-?

vēxillum: VÉXILLO, CIL. xii. 3167; Byzantine Gr. βήξιλλα; CIG. 4483, οὐηξιλλατι(ῶ)σιν; also acc. to Priscian, iii. 36.

vīctus: from vīvō.

villa: vILLA, CIL. vi. 9834; the Romance points to i.

vīndēmia: from vīnum and dēmō. Vīpsānius: VIPSANI, CIL. vi. 12782; VIPSANIA, CIL. vi. 8877; Βειψάνως, CIG. 5709. Vipstānus: VIPSTANVS, CIL. vi. 2039 and frequently; Οδειψτανοῦ, CIG. 5837, b.; CIA. iii. 621.

viscus: VISCERIS, CIL. vi. 1975.

vīvō, ere, vīxī, victum: see § 46. 3; VEIXIT, CIL. xiv. 2485; VIXIT, CIL. ii. 3449; VICTÝRO, CIL. vi. 12,562; βείξιτ in an inscription cited by Eckinger (Orthographie Lat. Wörter in Griech. Inschriften, p. 43).

vīctus: like vīvo.

Vopīscus: Gr. Οὐοπεῖσκος; VOPISCO, CIL. x. 4872.

X.

Xenophon, -ontis: Gr. Εενοφων, -ωντος.

Z.

zöster: Gr. ζωστήρ.

53. Words whose Hidden Quantities are in Dispute.

agnātus, agnōtus, etc.: ā Marx; see § 38.

agnus: \bar{a} acc. to all the authorities; but see § 38.

allicio: some scholars mark the e of the Perfect long in allexī, illexī, pellexī; and likewise in -spexī (aspexī, cōnspexī, etc.), flexī, pexī, vexī. This marking rests upon a statement of Priscian in ix. 28. But Priscian in this passage simply says that Perfects in -xī have a long vowel before the x only when the vowel is e; he does not state that every e is long before -xī. Moreover, little weight is to be attached to this testimony; for in the paragraph immediately preceding (ix.

27) Priscian lends the weight of his authority to such forms as trăxī, mănsī, dūxī, which certainly had a long vowel in the best period. Osthoff (Geschichte des Perfects, p. 227) and Brugmann (Grundriss der Vergleichenden Grammatik, ii. p. 1182) support ē in Perfects of this type by arguments drawn from comparative grammar; but the evidence does not warrant a positive conclusion in their favor.

amygdalum: y Marx, without citation of evidence. Gröber (Archiv, i. 240) and Körting (Wörterbuch, col. 45) give y.

Appulus, Appulia: A Marx. Apulus, Apulia are the better spelling.

arca: a Marx and Lewis (E.L.D.). The word occurs with the apex (ARCAE) in Boissieu, Inscriptions de Lyon, p. 279, but it is doubtful whether this single instance justifies our recognizing the a as long. The root arc-, 'hold, confine,' had originally a short vowel, as is shown by coerceo (for *co-arceo): *arceo would have retained the \bar{a} in composition; see § 72. Nevertheless it is undeniable that a tendency existed in certain localities to lengthen the short vowel before r + a con-In some words this resulted in permanent lengthening of short vowels in the classical speech, e.g. in forma, quartus (cf. quattuor); orca, and probably in ordo, ordior, orno. In case of other words we simply meet isolated local manifestations of the tendency, e.g. in ARVALI, CIL. vi. 913: LIBÉRTIS, CIL. x. 3523; SÉRVILIO, Henzen, 6490; VIRGO, CIL. vi. 2150; VIRTVTIS, CIL. vi. 449; CÓRVINVS, vi. 2041; ÓRFITO, vi. 353; CORDIAE, vi. 22,915; NAR-BÓNE, xii. 3203; NARBONÉNSIS, xii. 3163; HÓRT[OS, vi. 9493; COHÓRT-[IS, vi. 2993; FÓRT[IS FÓRTVNAE, vi. 9493; FÓRTVNATA, vi. 7527. Yet these sporadic inscriptional markings hardly justify our assuming ārvum, ārvālis, lībērtus, sērvus, vīrgō, etc., for the classical speech; and the same applies to arca. See Seelmann, Aussprache des Latein, p. 91.

Arrūns: Ā Marx.

arundo: ū Lewis (E.L.D.), apparently on the basis of a statement by an anonymous sixth century

grammarian (Keil, viii. 111. 14); but the Romance points to u. Gröber, Archiv, i. 243; Körting, Wörterbuch, col. 71.

arvum, arvālis: see arca.

ascendo, ascribo, etc.: ā Marx; see § 48.

ascia: ā Marx; see § 89.

Asclepiades: Ā Marx.

Asculum: A Marx.

aspernor, asporto, etc.: ā Marx; see § 48. aspicio, ere, exī, ectus: ēxī Lewis; see above under allicio.

assus: ā Marx, as if for *ārsus, which is improbable. See Osthoff, Geschichte des Perfects, p. 545.

astus: ā Marx, as if for *axtus; see § 89.

attrecto: ē Marx, who explains attrēcto as for attrācto (from trāctus); but \bar{a} never becomes \bar{e} in Latin: on the other hand the vocalism of attrecto points necessarily to a previous *at-trăcto (see § 46. 4. c). Unless, therefore, we reject the evidence in favor of tractus as the regular form of the participle of traho and its compounds (see § 46. 3. b), we shall have to assume the existence of an original 'by-form' trăctus, to which we shall refer attrecto, contrecto, obtrecto, etc. Similar doublets existed in case of dictus: dictus (§ 52. s. v.); fructus: fructus (§ 52. s. v.), and possibly latus: *latus (whence Latium, 'the broad country').

axis: ā Marx, without warrant; Charisius (Keil, i. 11. 22) and Diomedes (Keil, i. 428) both testify to ă. braccae: ā Marx; see § 88. 1.

bēs, bessis : ē in oblique cases Marx; but in view of Quintilian's statement (i. 7. 20) that ss was not written after a long vowel in the post-Ciceronian period, it is much more probable that the word followed the analogy of as, assis. Osthoff, Geschichte des Perfects, p. 545.

caballus: ā Marx, as if a diminutive from an assumed *cabānus, for which there is no warrant.

Camillus: i acc. to Appendix Probi (Keil, iv. p. 197); i acc. to Martianus Capella (p. 66. 4, ed. Eyssenhardt).

capessō: ē acc. to Osthoff (Geschichte des Perfects, p. 221), who regards capessō, facessō, lacessō, as originally aorists of the same type as habēssō, licēssit, etc. Brugmann (Grundriss, ii. p. 1203), taking a different view of the formation, regards the e as short.

carduus: possibly \bar{a} , if from the same root as $c\bar{a}r$ -ex, 'sedge' (lit. 'rough plant'?).

carrus, carrūca: ā Marx.

Cassandra: Cass- Marx.

cēdō, -ere, cessī, cessūrus: ē Marx; cessī acc. to Priscian, ix. 27; the Romance languages point to e in both cessī, and cessūrus (d'Ovidio, in Gröber's Grundriss, i. p. 510; Osthoff, Geschichte des Perfects, p. 537). Körting, Wörterbuch, col. 186, strangely gives ē.

cesso: ē Marx; see cēdo.

cingo, -ere, cinxi, cinctus: Marx and Lewis (E.L.D.) regard the i as short in cinxi, cinctus; likewise in -stinxi, -stinctus; tinxi, tinctus (except that Lewis has tinctus); and in pinxi, finxi. The Romance languages seem to point to i in the Perfect and Perfect Participle of all

these words, e.g. Italian cinsi, cinto; stinsi, stinto; finsi, finto, etc. Inscriptions, moreover, give EXTINCTOS, CINCTVS. See d'Ovidio in Gröber's Grundriss, i. p. 501 f.; Körting, Wörterbuch, and Fröhde in Bezzenberger's Beiträge, xvi. p. 193.

classis: ā Marx, on the basis of an assumed etymological connection with clārus.

cognātus, cognōmen, cognōscō, and other words beginning with cogn-: the o here is usually regarded as long; but the evidence is not sufficient to warrant this view; see § 38.

confestim: ē Marx, after the analogy of manifēstus, which latter is somewhat uncertain.

conjungō, conjūnx: ō Marx, on the basis of cónivgi, CIL. v. 1066; vi. 9914, which are too improbable to merit acceptance.

conspicio, -ere, exi, ectus: exi Lewis; see above under allicio.

contrecto: ē Marx; see attrecto.

damma: ā Marx; see § 88. 1.

despicio, -ere, exi, ectus: -exi Lewis (E.L.D.); see under allicio.

detrecto: e Marx; see attrecto.

discidium, discribō, distō, distinguō, distringō: dīs- Marx and Lewis (E.L.D.); see § 48.

discō: î Marx, on the theory of compensatory lengthening (discō for *di-dc-scō); see § 89.

distinguo, -ere, īnxī, īnctus: see cingo.
duumvir: ū Marx and Lewis
(E.L.D.); see § 42. 1.

Dyrrhachium: \bar{y} Marx, who cites the modern name Durazzo.

ēnormis: ō Marx and Lewis (E.L.D.); see norma.

Erinnys: î Marx; cf. § 88. 1. exstinguö, -ere, înxî, înctus: see distinguö.

facessō: ē Lewis (E.L.D.); see capessō.

fastigium: ā Marx, on the theory of compensatory lengthening; see § 89.

fastus, 'disdain': ā Marx, on the theory of compensatory lengthening; § 89.

festinus, festino: ē Marx, on the theory of compensatory lengthening, as though for fendt-; see § 89.

festūca, fistūca: ē and ī Marx, on the theory of compensatory lengthening (see § 89), as though for ferst-fingō, -ere, fīnxī, fīctus: see cingō.

fistula: i Lewis (E.L.D.), but the Romance shows i; Gröber (Archiv, ii. 288); Körting (Wörterbuch, col. 328).

flecto, -ere, flexi: flexi Lewis (E.L.D.); see under allicio.

fluctus: d'Ovidio in Gröber's Grundriss, i. p. 515, and Körting, Wörterbuch, col. 334, regard the u as long on the basis of the Romance; but it is admitted that the evidence is not altogether clear. If Italian fiotto is the descendant of Latin fluctus, this points to u.

fuo, -ere, fluxī, fluxus: fluxī, Lewis (E.L.D.); fluxī, fluxus, Körting (Wörterbuch, col. 334); fluxus, d'Ovidio (Gröber's Grundriss, i. p. 515); but the evidence is extremely scanty and conflicting.

fons, fontis: o in the oblique cases, Lewis (E.L.D.), see § 41.

fors, forsit, forsitan, forte, fortasse, fortassis, fortuna, fortuitus: ō Lewis, apparently on the basis of the apex in CIL. vi. 9493; 7527. But the second of these occurs in an inscription which has HÓRTIS. See under arca. Marx writes forsit and forsitan on the basis of the Romance. This may be correct for these two words; but it is difficult to believe that the other words of this group have \bar{o} . Greek transliterations show $\phi \delta \rho \tau v v$, $\Phi \delta \rho \tau v s$.

fortasse, fortassis: ā Marx, who cites nothing in support.

frendo, -ere, frendui, fresus, or fressus: -essus Marx; § 98. 2.

frons, frondis: \bar{o} in the oblique cases, Lewis; see § 41.

frons, frontis: \bar{o} in the oblique cases, Lewis; see § 41.

futtilis: \bar{u} Marx; see § 88. 1.

Garumna: ū Marx.

garriō, garrulus: ā Marx, who connects with Gr. γāρύω.

gignō: i by most authorities; see § 38. gluttiō, gluttus: u Marx; see § 88. 1. grallae: a Marx.

hallucinor: \bar{a} Marx; see § 88. 1. hellu \bar{o} : \bar{e} Marx; see § 88. 1.

hesternus: hēs- Lewis, on the testimony of Marius Victorinus (Keil, vi. 15. 15). Historical grammar shows that the e was originally short. Cf. herī, Gr. χθέs, etc. Hence, it is doubtful whether the isolated statement of a fourth century grammarian should receive credit as an index of the classical pronunciation.

hircus: the quantity of the i is doubtful, as the Romance words upon which judgment is based may be 'semi-literary'; see § 36. 5 fin. Cf. Gröber (Archiv, iii. 139); Körting (Wörterbuch, col. 389).

hirundō: ū Lewis, on the basis of an anonymous sixth century grammarian (Keil, viii. 111. 14). But the Romance points unanimously to u; see Gröber (Archiv, iii. 139); Körting (Wörterbuch, col. 389).

hispidus: i Marx and Lewis. Marx cites the Romance, but the word is probably 'literary' in the Romance; see § 36. 5 fin. Neither Gröber nor Körting include it in their collections.

icō, icere, īcī, ictus: īctus Marx; but icō seems to have been the normal present; while īcō occurs only in rare cases of metrical lengthening. Hence, in the absence of specific evidence, ictus is more probable than īctus.

immō: īmmō Marx, in view of īmus; but cf. § 88. 1.

incesso: ē Marx; see cēdo.

înspicio, -ere, exi, ectus: -ēxī Lewis; see allicio.

intercessio: ē Marx; see cēdo.

jubeo, -ēre, jussī, jussus : jūssī, jūssus Marx; jussī, jūssus Lewis. The only authority for \bar{u} in jussus is ivssvs, CIL. vi. 77. But the apex here is entitled to no weight. The same inscription has at least one other error in the use of the apex, viz. Annivs. In favor of jūssī we find Ivss[IT, CIL. xii. 1930; IvssIT, iv. 25531; and IOVSIT, CIL. i. 547 a, et passim in inscriptions of the ante-classical period. The simplest solution of the difficulties is to recognize an ante-classical jūsī, which is well attested by Quintilian in i. 7. 21, and a classical jussi. The shortening occurs in accordance with the principle explained in § 88. 1. In view of Quintilian's additional statement that jussī was the orthography of his day, and that ss was not written after a long vowel (i. 7. 20) this is almost a necessary conclusion. The apex in CIL. xii. 1930 is then a blunder, a result of the confusion of jūsī and jūssī. See Osthoff, Geschichte des Perfects, p. 532 ff.; Brugmann, Grundriss, ii. 1182; Fröhde, Bezzenberger's Beiträge, xvi. p. 184.

Juppiter: \bar{u} Marx; see § 88. 1.

lacesso: ē Lewis; see capesso.

lascivus: ā Marx, on the basis of an assumed etymology, which connects the word with the root lās-(lār-) of lārua.

libertus: ē Lewis; see arca.

libertas: ē Lewis; see arca.

limpidus: Mark, on the basis of the Romance lindo; so Körting, Wörterbuch, col. 454; but others question the connection of lindo with limpidus, and refer the former word to a Germanic origin.

littera: i Marx; see § 88. 1.

Messalla: ā Marx; see § 88. 1.

misceo, miscere, miscui, mixtus: i throughout acc. to Marx; mixtus Lewis. The Romance shows i throughout. Gröber, Archiv, iv. 117; Körting, Wörterbuch, col. 494; 496.

mitto, mittere, mīsī, missus: mīssus

Lewis (E.L.D.). The Romance
points to i; a few suspicious instances of i longa occur, e.g. DIMISSIS, CIL. iii., p. 862 (shown by
Osthoff, Geschichte des Perfects, p.
526, to be probably a blunder);
MISSIONE, x. 7890; REMISSA, xi.
1585.

mons, montis: o in oblique cases, Lewis; see § 41.

musca: \vec{u} Marx; u acc. to the Romance.

musso : ū Marx, who compares mūtio. mussito : ū Marx; see musso.

Narbō, Narbōnēnsis: ā Marx; see under arca.

nesciō, nescius: ē Lewis; but compare nequeō. The Romance points to e.

norma: ō Marx, who connects with Gr. γνώριμος.

nūsquam: u Lewis; see ūsquam.

obtrecto: ē Marx; see attrecto.

ostrum: ō Marx, who connects with austrum.

pannus: ā Marx; cf. § 88. 1.

pellicio: see allicio.

perspicio: see aspicio.

pestis: ē Marx, in accordance with a fanciful etymology.

pilleus: i Marx; see § 88. 1.

pingō; see cingō.

 $p\bar{o}ns$, pontis: \bar{o} in oblique cases, Lewis; see § 41.

posca: ō Marx, who compares pō-culum; but the root had also a reduced form pŏ- (§ 69); cf. Gr. ποτόν.

poscō: ō Marx, on the theory of compensatory lengthening (pōscō for *porscō); see § 89.

postulo: o Marx, as in the case of posco.

promiscuus: i Marx, as in the case of misceo.

propinquus: i Lewis; but the Provençal, which apparently is the only Romance language that inherited the word from Latin, points to i.

pulmo: ū Marx and Lewis. Marx

compares Gr. $\pi\lambda\epsilon\nu\mu\omega r$, which proves nothing for Latin; the Romance points to u. Cf. Stolz, Lat. Gram., p. 283, who explains $pulm\bar{o}$ as for * $plm\bar{o}$; see § 100. 1.

quousque: Lewis u; see usque.

recessus: ē Marx; see cēdo.

respicio, -ere, exī, ectus: -ēxī Lewis; see allicio.

Sallustius: ā Marx.

sēcessus: ē Marx; see cēdō.

sescenti: ses- Marx and Lewis, on the theory of compensatory lengthening; see § 89. Marx compares Sestius (for Sextius), but e in that word is exceptional. See Fröhde, Bezzenberger's Beiträge, xvi. 204.

sinciput: i Marx and Lewis, on the basis of the etymology sēmi + caput, i.e. sīnciput for *sēnciput by vowel assimilation; § 90.

stannum: ā Marx, on the basis of the 'by-form,' stāgnum.

stella: stēla acc. to the Romance; probably the form with two l's had e. strenna: ē Marx; see § 88. I.

supparum: ū Marx; cf. § 88. 1.

suspiciō, -ere, exī, ectus : ū Marx; see § 48. On suspexī, see alliciō. taxō : ā Marx.

testa: ē Marx and Lewis, on the theory of compensatory lengthening (testa for *tersta); see § 89. The Romance points to e.

testis, testor, testāmentum, testimonium, etc.: ē Marx, on the theory of compensatory lengthening (tēstis for *terstis); see § 89.

tinguō, -ere, tīnxī, tīnctus: see cingō. torreō, -ēre, torruī, tostus: tōstus Marx, on the theory of compensatory lengthening (tōstus for *torstus); see § 89. The Romance points to o. See d'Ovidio in Gröber's Grundriss, i. p. 520; Körting (Wörterbuch, col. 726); Gröber (Archiv, vi. 129).

tressis: ē Marx; see bes, bessis.

Tuscī: ū Marx and Lewis, on the theory of compensatory lengthening (Tūscī for * Turscī); see § 89. The Romance points to u.

Tusculum: u Marx and Lewis; see Tusci.

ultrā, ulterior, ultimus, etc.: ū Marx and Lewis, on the basis of an alleged apex in VLTRA, Boissieu, Inscriptions de Lyon, p. 136. But the apex does not occur there. See Lindsay, Latin Language, p. 595. The Romance points to u.

urceus: \bar{u} Marx, who cites $\bar{o}rca$; but the Romance points to u.

urna: \bar{u} Marx and Lewis. Marx compares $\bar{u}rin\bar{a}tor$; but urna is to be referred to the root arc-, weak form urc- (§ 100. 2), whence ur(c)na. The Italian urna, if a genuine Latin inheritance, would point to \bar{u} ; but it is probably purely literary; § 36. 5 fin.

ūrō, -ere, ussī, ūstus: ūssī Marx; but Priscian (Keil i. 466. 6) gives ŭssī. See under jubeō.

viscum: i Marx and Lewis. Marx cites the evidence of the Romance;

but Gröber (Archiv, vi. 144), Körting (Wörterbuch, col. 766), and d'Ovidio (Gröber's Grundriss, i. p. 503), interpret the Romance as pointing to i.

vectigal, vectis, vecto, vector, vectūra, etc.: ē Lewis. The only evidence is that furnished by the Romance in the case of vectis; this points to e. The related words must have had the same quantity.

vehō, -ere, vexī, vectus: vēxī, vēctus Lewis. For vēxi, see under alliciō; on vectus, see vectīgal.

Venafrum: \bar{a} Marx, and the lexicons; on what grounds is not clear.

vescus: ē Marx, on the basis of the questionable etymology vē + ēsca. vexō: ē Lewis; see vectīgal.

victor, victus, victōria, etc.: ī Lewis, on the basis of repeated inscriptional markings, such as VICTOR, CIL. vi. 10056; 10115; 1058; VICTORINVS, vi. 1058; VICTORIAM, vi. 2086; INVICTAI, vi. 353. But with a single exception no one of these inscriptions can be shown to antedate the third century A.D.; and I quite agree with Christiansen (de Apicibus et I longis, p. 49) in the view that in the classical period the i was short; later, apparently it was lengthened.

CHAPTER IV.

ACCENT.

See Brugmann, Grundriss, i. §§ 679 ff.; Stolz, Lateinische Grammatik,² pp. 317 ff.; Lateinische Lautlehre, pp. 95 ff.; Seelmann, Aussprache des Latein, pp. 15 ff.; Lindsay, Latin Language, pp. 148 ff.

- **54.** Accent in general is the prominence of one special syllable of a word as compared with the other syllables of the same word. This prominence may manifest itself in three different ways. Thus:
- 1. A syllable may be made prominent by 'stressing' it, i.e. by uttering it with a more energetic expulsory act on the part of the lungs (stress accent). The English and German accent are of this nature.
- 2. A syllable may be made prominent by uttering it at a higher pitch than the other syllables of the same word (*musical accent*). The Greek and Sanskrit accent were of this kind.
- 3. A syllable may be *quantitatively* prominent, *i.e.* its time may be greater than that of the other syllables of the same word. No language was ever accented essentially on the quantitative principle alone; but traces of the operation of this principle are noticeable at one stage of Latin accentuation.

Neither stress accent nor musical accent prevails alone in any language. As a rule the one constitutes the essential accentual principle of a language, while the other is subordinate. Thus in English we notice chiefly the stress accent; but the rise and fall of pitch also exists as a feature of the spoken language.

55. 1. The Latin accent was essentially a stress accent; so far as a musical accent existed, it was subordinate to the other. In

the prehistoric period the Latin accent rested upon the initial syllable of the word. In this respect Latin represents a deviation from the accentuation of the Indo-European parent-speech. In the parent-speech the accent was free, *i.e.* it might rest upon any syllable of a polysyllabic word. Evidences of the prehistoric Latin accent (*i.e.* the stress accent on the initial syllable) are seen in the weakening of unaccented vowels and in the loss of unaccented syllables. Thus:

- a) Vowel-weakening: exerceō for *éx-arceō; cōnficiō for *cón-faciō; exīstumō for *éxaistumō; inimīcus for *in-amīcus; con-tubernālis for *cóntabernālis; cecīdī for *cécaidī (caedō); conctūdō for *cón-claudō; Mānlius for Mánilius.
- b) Syllable-loss: repputī for *ré-peputī; surpuī for *súr-rapuī; ūn-decim for *úno-decem.
- 2. In course of time another factor seems to have become operative in Latin accentuation, viz. quantity. Apparently a long penult came to assume such prominence as to receive a secondary Thus péperci became pépérci; inimicus became inimicus; ėxīstumāmus became ėxīstumāmus. Where the penult was short. the preceding syllable seems to have received the secondary accent, as existumo for existumo; conficiunt for conficiunt. Ultimately this secondary accent prevailed over the primary initial accent, and thus established the traditional accentuation of the historical period, the so-called 'Three Syllable Law,' by which the accent is restricted to the last three syllables of a word, resting upon the penult if that is long, otherwise upon the antepenult. Yet the first syllable of Latin words seems to have always retained a certain degree of prominence; for it is regularly retained in Romance, while unaccented syllables in the interior of a word frequently vanish.
- 3. It is extremely improbable that Latin in the historical period was as strongly stressed as English and German, for example. One reason for this is found in the accentuation of the Romance languages. These, in the main, retain the Latin accent in its

original position, but they all agree in showing a much slighter degree of stress on the accented syllable than exists in English or German. More weighty is the evidence of Latin poetry. Here the quantitative principle is the fundamental basis of the verse. A decided stress accent would have conflicted with this to the extent of obscuring the metrical character of the verse. over, we often find Latin words containing an unbroken succession of long syllables, e.g. ēdīcēbātur. A strong stress accent is inconsistent with such conditions, as may be seen from the strongly stressed modern languages. Cf. Eng. inévitable with Latin inevītābile. While, therefore, stress always remained the essential characteristic of the Latin accentuation, yet the stress was relatively slight, and probably slighter in the historical period after the establishment of the 'Three Syllable Law,' than in the prehistoric period when the principle of initial accentuation prevailed. It seems a fair conclusion that the diminution in the intensity of the stress accent was due to the encroachments of the quantitative principle. Thus a long penult is seen to have developed a secondary stress which ultimately gained complete ascendancy and became the primary accent of the word.

- 4. Attention has been called in the Grammar, § 6, 4, to cases where, by the loss of a final vowel, the accent has come to stand upon the last syllable of certain words. Other instances of the same sort are disturbāt for disturbāvit; mūnīt for mūnīvit. The principle is stated by Priscian (xv. 17-18). Arpīnās, Samnīs, nostrās, Campāns, etc., are also cited by the grammarians as having an accent upon the last syllable, as though for Arpīnātis, Samnītis, nostrātis, Campānus, etc. See, for example, Priscian iv. 22. Such forms as benefācit, satisfācit, are properly written bene facit, etc.
- 5. Various Latin grammarians have seemed to support the theory of the existence of a musical accent in Latin, e.g. Nigidius Figulus (in Gellius, Noctes Atticae xiii. 26. 1-3); Audacis Excerpta (Keil, vii. 357. 14 ff.); Priscian, de Accentu, 2. 5. These

writers recognize an acute (') and a circumflex (^), and lay down specific rules for their employment. According to them, the acute stood upon all short vowels as $n\dot{u}x$, $b\dot{e}ne$, $v\dot{e}terem$, and upon a long vowel in the antepenult, as $r\dot{e}gibus$. It also stood upon a long vowel of the penult in case the ultima was long, as $r\dot{e}g\bar{e}s$. If the ultima was short, a long penult took the circumflex, as $r\dot{e}ge$. The circumflex also stood upon long vowels of monosyllabic words, as flos. But it is more than probable that these rules are merely an echo of the principles of Greek accentuation, just as the rules given for syllable-division by certain Latin grammarians were probably merely a learned fiction in imitation of the Greek rules. See § 35.

CHAPTER V.

ORTHOGRAPHY.

See Brambach, Die Neugestaltung der Lateinischen Orthographie, Leipzig, 1868, and the same author's Hülfsbüchlein für Lateinische Rechtschreibung, 3d ed., Leipzig, 1884; Georges, Lexikon der Lateinischen Wortformen, Leipzig, 1890.

56. The orthography of Latin words naturally varied at different periods, and even within one and the same period there was not unfrequently considerable discrepancy between different writers. During the classical era relatively slight attention was paid to the study of the language, and as a result we notice the absence of any recognized standard of spelling such as prevails in modern languages. This lack of a recognized norm compels us to resort to other sources of information in order to determine the best spelling for a given era. Our manuscripts of the Latin writers unfortunately have been so altered in the course of transmission from the past, that they seldom furnish trustworthy evidence. A few of the oldest give valuable indications of the contemporary spelling; but more often the Mss. have been adapted to the standards of a later age, and are full of the errors and inconsistencies of the Decline. On the whole, carefully cut official inscriptions furnish the safest reliance. The testimony given by these is supplemented for the post-Augustan era by the statements of grammarians, who, beginning with the first century A.D., devoted much systematic attention to orthographic questions. points belonging here have already been anticipated in connection with the discussion of Pronunciation. The following special classes of words call for further consideration:

- 57. I. Words of the type mentioned in Gr. § 9. I; 4, viz. quom, volt, volnus, voltus, volgus; Nouns and Adjectives in quos, quom; -vos, -vom; -uos, -uom; and Verbs in -quont, -quontur; -vont, -vontur; -uont, -uontur. This was the original spelling and continued to be the regular orthography down to about the beginning of the Augustan Age. After that it was still retained, particularly in special words as an archaic reminiscence. But as a rule, beginning about the 8th century of the city (Brugmann, Grundriss, I. § 431; Stolz, Lat. Gr. § 46; Lindsay, Latin Language, p. 299; Bersu, Die Gutturalen, p. 53 ff.), the following changes took place:
- a) vol + a mute or a nasal became vul, e.g. vultus, vulnus. But proper names show a preference for the early form, e.g. Volcānus, Volscī, etc.
- b) -vos, -vom, -vont, -vontur became -vus, -vum, -vunt, -vuntur, e.g. saevus, saevum, solvunt, solvuntur.
- c) -uos, -uom, -uont, -uontur became -uus, -uum, -uunt, -uuntur, e.g. perpetuus, perpetuum, acuunt, acuuntur.
- d) -quos, -quom, -quont, -quontur developed somewhat at variance with the foregoing classes. They first became -cus, -cum, -cunt, -cuntur, yielding, e.g., ecus (for equos); cum (for quom); relincunt (for relinquont); secuntur (for sequentur).
- 2. This spelling established itself during the Augustan Age, and continued to be the standard orthography in words of this class until shortly after the close of the first century A.D., when -cus, -cum, -cunt, -cuntur became -quus, -quum, -quunt, -quuntur. This change was the result of analogy. Thus in a word like ecus, for example, the preponderance of forms containing qu (equī, equō, equō, equīs, etc.) in time naturally produced the change from ecus to

¹ Examples are ANTICVM, CIL. vi. 615. 4 b); cocvs, CIL. vi. 8753 f.; 9264 f.; PROPINCVS, CIL. vi. 2408. 3; iii. 5274 a. 2. Cf. Gr. Προπίνκος, CIG. 6430. Manuscripts also preserve numerous traces of such spellings. For examples occurring in the Palatine codex of Vergil's Aeneid, see Bersu, p. 88, N.

equus; and from ecum to equum. Similarly, in the verb such forms as relincunt, secuntur ultimately became relinquunt, sequuntur, owing to the influence of the forms containing qu, relinquis, relinquit, relinquimus; sequitur, sequimur, etc.

- 3. It is interesting to note that the conjunction cum remained unaffected by this tendency. Not forming part of a paradigm containing qu-forms, it remained intact. The form quum, though occasionally found still in texts, does not appear in Latin inscriptions or Mss. prior to the 6th century A.D. (Bersu, Die Gutturalen, p. 44, N.).
- 4. What has been said of forms in original -quont, -quontur, applies similarly to forms in original -(n)guont, -(n)guontur. Thus an exstinguont became first exstingunt, then later (after analogy of the other forms of the same tense) exstinguunt; so exstinguontur developed through the medium of exstinguntur to exstinguuntur.

58. Assimilation of the Final Consonant of Prepositions in Compounds.

- a) In compounds of ad the preposition appears,—
 - 1) Before c, as ac-, e.g. accipio.
 - 2) Before f, as ad- or af-, e.g. adfero or affero.
 - 3) Before g, as ad- or ag-, as adgredior or aggredior.
 - 4) Before 1, as ad- or al-, as adlatus or allatus.
 - 5) Before n, as ad- or an-, as adnitor or annitor.
 - 6) Before p, as ad- or ap-, as adporto or apporto.
 - 7) Before r, as ad- or ar-, e.g. adrīdeo or arrīdeo.
 - 8) Before s, as ad- or as-, e.g. adsero or assero.
 - 9) Before t, as at-, e.g. attineo.
 - 10) Before q, as ad- or ac-, e.g. adquirō or acquirō.

NOTE. — Yet in all the above instances, even when ad- is written, it is probable that af-, ag-, al-, an-, etc., were regularly spoken, i.e. the matter was a purely graphical one. A sense for the etymology and a desire to indi-

cate the actual component elements of the word prompted a spelling which, strictly speaking, was inexact.

- 11) Before gn, sp, sc, st, we find sometimes a-, sometimes ad-, e.g. agnōscō, adgnōscō; aspīrō, adspīrō. Here again the spelling adgn-, adsp-, etc., is purely etymological, and does not indicate the actual utterance; the d disappeared in these consonant groups in accordance with the principle explained in § 105. 1.
- 12) In all other cases ad was retained both in spelling and pronunciation.
- b) In compounds of com-, the preposition appears
 - 1) Before b, p, m as com-, e.g. combibo, comporto, commoror.
 - 2) Before c, q, g; d, t, n; f, s; j, v, as con-, e.g. conciliō, conquirō, congerō; condō, conterō, connāscor; conferō, conserō; conjungō, convincō.
 - 3) Before 1, as con- or col-, e.g. conlātus or collātus.
 - 4) Before r, as con- or cor-, e.g. conruō or corruō.

Note. — Before 1 and r, even though con- was written, col- and cor- were probably spoken. See note on ad above.

- 5) Before gn con-dropped its n (see § 105. 1), e.g. cognosco.
- 6) The origin of co- in conitor, coniveo, conubium, etc., and of co- in coactus, co-addo, etc., is uncertain. Some regard co- as a different word here.
- c) The Preposition ex (= ecs) before f lost the c (§ 105. 1) and then assimilated s to f, e.g. effer \bar{v} , for e(c) sfer \bar{v} (cf. differ \bar{v} for *disfer \bar{v}). Another form sometimes arises by the loss of the s, e.g. ecfer \bar{v} , ecfatus, etc. This orthography is found mainly in the archaic period.
 - d) The Preposition in appears,
 - 1) Before 1 as in- or il-, e.g. inlatus or illatus.
 - 2) Before r as in- or ir-, e.g. inrumpo or irrumpo.

3) Before m, p, and b as in- or im-, e.g. imbibō or inbibō; importō or inportō; immortālis or inmortālis.

NOTE. — Yet in all these cases even when n was written, it is probable that assimilation occurred in the actual speech. See above, under ad, note.

- 4) In all other cases in- was both written and pronounced.
- e) The Preposition ob
 - Is regularly assimilated to oc-, of-, og-, op- before c, f, g, and p respectively, e.g. occurro, offendo, oggero, oppono.
 - 2) Elsewhere the b is regularly retained in writing and in pronunciation, except that before s and t, b had the sound of p. See § 27. Our Mss. of Plautus, Terence, and Lucretius often have op- in this situation; but Quintilian (i. 7. 7) assures us that for his time good usage demanded ob.
- f) The Preposition per sometimes appears as pel before 1, e.g. pellicio. Elsewhere r is retained; pējero does not contain the preposition per.
 - g) The Preposition sub
 - Is regularly changed to suc-, suf-, sug-, sup- before c, f, g, and p respectively, e.g. succurro, suffectus, suggestus, supplex.
 - 2) Before m appears as sub- or sum-.

NOTE. — Yet subm- was probably merely the etymological spelling for summ-. See note, under ad, above.

- h) The Preposition trans
- 1) Is regularly retained before vowels and b, c, f, g, p, r, t, v, e.g. trānseē, trānsferē, trānsportē, trānsversus.
- 2) Becomes tran-, often before s, and always before sc-, e.g. trān-serō, trān-scrībō.
 - 3) Becomes trā- before j, d, 1, m, n (§ 105. 2), e.g. trāiciō, trādūcō, trānō. Yet before these sounds trāns- is often restored by re-composition (§ 87. 3).

59. Seelmann (Aussprache des Latein, p. 61 f.) thinks that such spellings as adr-, ads-, inl-, inr- in the prepositional compounds above considered, indicated the actual pronunciation. This pronunciation, however, he considers to have been a faulty one, emanating from half-educated persons striving for special correctness. Terentius Scaurus, Priscian, and Appendix Probi all expressly declare the etymological spelling to be incorrect in the type of words under discussion.

On the whole, there seems very little to commend the employment of the etymological spelling. If we take it as intended to indicate pronunciation, we can hardly reject the express statements of the grammarians that such pronunciation was wrong. If, on the other hand, we regard the etymological spelling as purely graphical, there seems no advantage in writing adl, adg, inr, inl, etc., where all, agg, irr, ill were actually spoken, especially since the Romans themselves often indicated the assimilation. For the purposes of elementary instruction in particular, the assimilated forms are decidedly to be preferred as a uniform spelling.

60. Compounds of jacio. As indicated in $Gr. \S 9.3$, these are better written inicio, adicio, etc. That a j was pronounced after the preposition, is made probable by the fact that the first syllable of these words is used as long in verse. Possibly the analogy of $\bar{e}icio$, $d\bar{e}icio$, $r\bar{e}icio$ (where a j would naturally be pronounced, even if not written) led to the omission of j in other compounds also.

61. List of the Most Important Words of Doubtful or Varied Spelling.¹

abicio: better than abjicio; § 60. ad in composition: § 58. adicio: better than adjicio: § 60. adolescens: see adulescens. Adria: see Hadria. adulescens: Brambach (Neugestaltung, p. 52) restricts this spelling to the noun, 'young man,' and for the participle of adolesco writes adolescens. adulescentia, adulescentulus : like adu-Tescens. Aedui: preferable to Haedui, acc. to Brambach (Hülfsbüchlein, p. 22). aēneus, aēnus: better than ahēneus, ahēnus. agnosco and adgnosco: § 58, a). Alexandrea: this is the correct form for the Ciceronian period. Later Alexandria is found. alioqui and alioquin. allium and alium: § 88. I. allec: not alec. ancora: not anchora; § 31. 3. antemna: also antenna. Antiochea, Antiochia: like Alexandrēa, Alexandria. ānulus: not annulus. Apenninus and Appenninus. Apuleius and Appuleius : cf. § 88. 1. Apulia, Apulus. arbor: arbos is archaic and poetic. arcesso: in early Latin also accerso. Arcopagita and Ariopagita.

Arēus pagus and Arīus pagus.
artus, artāre: not arctus, arctāre.
arundō: not harundō.
auctor: not autor.
auctōritās: not autoritās.
aurichalcum: better than ōrichalcum.
autumnus: not auctumnus.

В.

baca: not bacca.

balbūtio: not balbuttio.

ballista and balista.
balneum, balneae: balineum occurs in early Latin.
bēlua: not bellua.
beneficium: preferable to benificium.
beneficius: preferable to benificus.
benevolentia: preferable to benivolentia.
benevolus: preferable to benivolus.
bibliothēca: bybliothēca also occurs.
bipartītus and bipertītus: § 87. I.
Bosphorus: § 31. 3 fin.
bracchium: also brāchium.
Britannia, etc.: better than Britt-.

C.

Brundisium: not Brundusium.

caecus: not coecus; § II.
caelebs: not coelebs; § II.
caelum and derivatives have ae, not
coel-; § II.
caementum: not coenum; § IO. 2.
caenum: not coenum; § II.

¹ The standard followed in this list is the usage of the early Empire, —roughly speaking, the first century A.D. The correct form is given first. Words belonging to the classes treated in §§ 57-60 are, for the most part, omitted from the list.

caerimonia and caeremonia: not ceri- | cumba: also cymba. monia; § 10. 2. caespes: not cespes; § 10. 2. caestus : not cestus ; § 10. 2. caetra: not cētra; § 10. 2. Camena: not Camoena; § 11. causa: caussa was the pre-Augustan form: § 98. 2. cēna: not coena: § II. Cereālis and Ceriālis; Ceriālia. cēterī: not caeterī; § 10. 2. Cethēgus: Cetēgus is pre-Ciceronian; § 31. 3. circumeo and circueo. claudo: cludo is rare and the result of 'De-composition'; see § 87. 2. clipeus: better than clupeus, the early spelling; § 6. 2. Clytemēstra: not Clytemnēstra. coclea and cochlea; § 31. 3. com- in composition: § 58, b). comissari and comisari. comminus: not cominus. comprehendo: better than comprendo. con- in compounds: \S 58, b). condicio (con and root dic-): not conditio. conecto and derivatives: not connecto, conicio: better than conjicio; § 60. A form coicio also occurs. conitor: not connitor. coniveo: not conniveo. conjunx: better than conjux. contio (for coventio): not concio; § 25. 3. conūbium: not connūbium. convicium: not convitium; § 25. 3. cottīdiē and cotīdiē: not quotīdiē. cothurnus and coturnus: § 31. 3. culleus, culleum: not culeus, culeum;

cum: never quum; see § 57. 3.

cupressus: not cypressus. cur: quor is ante-classical.

D.

damma: not dama; § 88. I. Danuvius: not Danubius. Cf. § 16. 2. Dareus: better than the later form Darius.

Decelea: better than the later form Decelia.

defatigo, defatigatio: also defet-; see § 87. I.

dēicio: better than dējicio; see § 60. delectus, 'choosing'; also dilectus. delenio: better than delinio; cf. § 90. deprehendo: also the contracted form deprendo.

dērigō: also dīrigō, which is probably the original form. Brambach, however, recognizes two independent verbs: dērigo, 'to move in a particular direction,' and dirigo, 'to move in different directions.'

detrecto: also detracto; § 87. 1. dexter, dextera, dexterum: also dextra, dextrum; but regularly dextera when used as a substantive.

dicio: not ditio; § 25. 3. dinosco: earlier dignosco.

disicio: better than disjicio; § 60. Duīlius or Duillius.

dumtaxat: not duntaxat; § 87. 1. dipondius: earlier dupondius; § 6. 2.

E.

eculus: cf. § 57. d). ēicio: better than ējicio; § 60. elleborus: better than helleborus. ēmptus, ēmptio, ēmptor : not ēmtus, etc. epistula: better than epistola. Erinys: not Erinnys. erus, era, erīlis : not herus, etc.; § 23.

Esquiliae, Esquilinus: not Exquiliae, | hallucinor and halucinor; cf. § 88. 1; etc. Euander: not Evander. exedra and exhedra. existimatio, existimo: existumatio, existumo are the early spelling; § 6. 2. exsanguis, exscindo, exscribo, exsilium, exspecto, and other compounds of ex with words having initial s: better than exanguis, excindo, expecto, etc.

F.

faenerator, faenero: not fenerator, etc.; § 10. 2. faenum: not fenum, nor foenum; § 11. faenus: see faenerator. fecundus, etc.: not foecundus, etc., § 11. femina : not foemina ; § 11. fetidus, etc.: not foetidus, etc., § 11. fetus: not foetus; § 11. finitimus: earlier -umus; § 6. 2. forensia and foresia: § 20. 2. futtilis: better than futilis; § 88. 1.

G.

gaesum: not gesum; § 10. 2. garrulus: not gārulus. Genēva: acc. to Gröber in Wölfflin's Archiv, ii. 437. genetīvus: not genitīvus. genetrix: not genitrix. glaeba and gleba. gnārus: also nārus in Cicero's time. gnātus, gnāta: this is the early form, used also in poetry; later nātus, nāta. grātīs and grātīs. The latter form is

H.

archaic.

Hadria, etc.: not Adria, etc.; § 23. Halicarnasus.

also al-, all-; § 23. Hammon: better than Ammon; § 23. harēna: better than arēna; § 23. hariola; also ariola; § 23. haruspex: better than aruspex; § 23. haud: sometimes haut; § 28. haveo and aveo; § 23. hedera: better than edera; § 23. helluo, helluatio: better than heluo, etc. Henna: better than Enna; § 23. Heraclea: later Heraclia. hercisco and ercisco: § 23. heri: also here (a different formation). Hiber, Hiberes, etc.: not Iber, etc.: § 23. hiems: not hiemps. Hīlotae: not Hēlotae.

I.

Hister: better than Ister; § 23.

holitor, holitorium: see holus.

holus: better than olus; § 23.

imb- in compounds: \S 58. d) 3). imm- in compounds: § 58. d) 3). immo: not īmo. *imp*- in compounds: \S 58. d) 3). inclitus and inclutus: not inclytus. incoho and inchoo. ingrātīs and ingrātiīs. inicio: better than injicio: § 60. inl- in compounds: \S 58. d) 1). in primis, inprimis, imprimis: § 58. d) 3). inr- in compounds: § 58. d) 2). intellegentia, intellego: see § 87. 1. intimus: earlier intumus; § 6. 2.

T.

jūcundus: not jocundus. Judaea: not Judea; § 10. 2. jūniperus: not jūnipirus. Juppiter: better than Jupiter; § 88. 1. K.

Kaesō and Caesō. Kalendae: better than Calendae. kalumnia: in legal expressions for

calumnia.

Karthago and Carthago.

L.

lacrima: earlier lacruma (archaic
 dacruma); § 6. 2; not lachrima
 nor lachryma; § 31. 3.

lagoena: not lagena; § 11.

lāmina and lammina, also syncopated lāmna.

lanterna: better than laterna. Larentia (in Acca L.): not Laurentia.

lautus: better than lotus.
lēgitimus: earlier lēgitumus; § 6. 2.

libet, libens, libido: earlier lubet, etc.; § 6. 2.

lis: but stlis in the legal phrase stlitibus jūdicandis; § 104. I. b). littera: better than litera; § 88. I.

litus: rather than littus.

loquēla: not loquella.

M.

maereo, maestus, etc.; not moereo, etc.; § 11.

Māja: § 15. 3.

malevolentia: better than malivolentia.
malevolus: better than malivolus.
mancipium: earlier mancupium;

§ 6. 2.

manifestus: earlier manufestus; § 6.2. manipretium: earlier manupretium;

§ 6. 2.

maritimus: earlier maritumus; § 6.2.

Mauretānia: also Mauritānia.

māximus: earlier māxumus; § 6.2,

Megalēnsia and Megalēsia; § 20.2.

mercēnnarius: not mercēnārius.

Messalla: better than Messala: § 88. 1. | paenula: not penula; § 10. 2.

mille: plural millia and milia.
minimus: earlier minumus; § 6. 2.

monumentum and monimentum; § 6.2. muccus: earlier mūcus; § 88. 1.

multa: not mulcta.

multō: see multa.

mūraena: not mūrēna; § 10. 2. murra and myrrha.

orra and myrrma.

N.

nāvus: earlier gnāvus.

nē, 'verily': not nae; § 10. 2.

neglego, neglegentia: § 87. 1.

negotium, negotiator: not negocium,

etc.; § 25. 3.

nēnia: not naenia; § 10. 2. nēquicquam and nēquiquam.

novicius: not novitius; § 25. 3.

nunquam and numquam.
nuntio, nuntius: not nuncio, etc.;

§ 25. 3.

obicio: better than objicio; § 60.

oboedio : not obedio ; § 11.

obscēnus: better than obscaenus; not obscoenus; § 10. 2; 11.

obs- in compounds: not ops-; § 58.

obsōnium: also opsōnium (δψώνων).
obsōnāre: see obsōnium.

obstipēscō: earlier obstupēscō; § 6. 2. obtemperō, obtineō, obtulī: not opt-; § 58. e) 2).

opilio: better than upilio.

opp- in compounds; § 58. e) 1).

optimus: earlier optumus; § 6. 2. Orcus: not Orchus; § 31. 3.

Ρ.

paelex: not pellex; § 10. 2.
Paeligni: not Peligni; § 10. 2.
paenitet: not poenitet; § 11.

Parnasus: not Parnassus. parricida, etc.: earlier paricida; § 88. I. Paullus and Paulus. paulus: preferable to paullus. pedetentim and pedetemptim. pedisequus: not pedissequus. pējero: not pējuro; perjūro is a different word. percontor, etc.: better than percunctor, perjurus and pējurus. pessimus: earlier pessumus; § 6. 2. pilleus, etc. : not pileus, etc.; § 88. I. plaustrum: not plostrum. plebs: not pleps; § 58. e) 2). Pollio: better than Polio. pomerium: not pomoerium. Pomptinus: not Pontinus. pontifex: earlier pontufex; § 6. 2. Porsenna and Porsena; also Porsinna and Porsina. prehendo and prendo. prēlum: not praelum; § 10. 2. proelium: not praelium; § II. proicio: better than projicio; § 60. promunturium: better than promontuproscaenium: not proscenium; § 10. 2. proximus: earlier proxumus; § 6. 2. Publicola: on the early forms Poplicola, Puplicola, see publicus. publicus (from pubes): poplicus (early Latin) is from poplus = populus; puplicus is the result of the contamination of publicus and poplicus.

pulcher: early Latin pulcer; § 31. 3.

quamquam and quanquam. quattuor: better than quatuor. querēla: better than querella, quicumque: better than quicunque. quicquam and quidquam.
quicquid and quidquid.
Quinctus, Quinctius, Quinctilis,
Quinctilius: these are the forms
for the Republican period; under
the Empire Quintus, Quintilis, etc.
quom: § 57.
quor: see cūr.
quotiens and quoties.

R.

raeda: better than rēda; not rh-; § 10. 2. Raetia, Raeti: not Rhaetia, etc. reccidi (Perf. of recido): not recidi. recipero: earlier recupero; § 6. 2. Rēgium: not Rhēgium. rēicio: better than rējicio; § 60. religio: not relligio. reliquiae: not relliquiae. reliquus: early Latin relicuos; § 57. repperi (Perf. of reperio): not reperi. reppuli (Perf. of repello): not repuli. reprehendo or reprendo. res publica: not respublica. rettuli (Perf. of refero): not retuli. rotundus: in Lucretius sometimes rutundus; § 90.

S.

saeculum: not sēculum; § 10. 2.
saepēs: not sēpēs; § 10. 2.
saepēo: see saepēs.
saeta: not sēta; § 10. 2.
Sallustius: not Sālustius.
sāriō: better than sarriō.
satura: also later satira; not satyra.
scaena: not scēna; § 10. 2.
sepulcrum: not sepulchrum; cf.
§ 31. 3.
sescent: rather than sexcentī.
sētius: less correctly sēcius.
singillātim: not singulātim.

solacium: not solatium; § 25. 3. sollemnis: not sollennis. sollicito, etc.: not solicito. stellio: not stelio; § 88. 1. stillicidium: not stilicidium. stilus: not stylus. stuppa, etc.: not stupa, etc.; § 88. 1. suādēla: not suādella. subicio: better than subjicio; § 60. subm- in compounds: $\S 58. g$) 2). suboles: rather than soboles: § 90. subtemen: rather than subtegmen. subter, subtilis: § 58. e) 2). succ- in compounds: § 58. g). 1). succus: rather than sucus; § 88. I. Suebi: not Suevi: § 16, 2. suff- in compounds: § 58. g) 1). sulpur and sulphur: not sulfur; § 31.4. supp- in compounds: \S 58. g) 1). suscenseo: rather than succenseo. suspīcio: not suspītio; § 20. 3. Syrācūsius: also Syrācosius. Syria: earlier Suria; § 1. 5.

T.

taeter: not feter; § 10. 2. tanquam and tamquam. Tarracina: not Terracina. temperi (Adv.): not tempori. tentare and temptare. Thalia: Thalea is pre-Augustan. thēsaurus: thēnsaurus is archaic. Thrax and Thraex (Opat). tingō: also tinguō. totiens: also toties. trājectus: not trānsjectus; § 58. h) 3). trans- in composition: § 58. h). transicio and traicio: better than trānsjicio, trājicio; § 60. transnare and tranare: § 58. h). Trēveri: rather than Trēviri. tribunīcius not tribunītius : § 25. 3. tripartitus and tripertitus: § 87. 1.

triumphō, triumphus: not triumpō, etc. tropaeum and trophaeum. tūs: rather than thūs. tūtēla: better than tūtella.

U. ubicumque: better than ubicunque.

Ulixēs: not Ulvssēs. umerus: better than humerus; § 23. umidus, umor, etc.: not humidus, etc.; unguō and ungō. unquam and umquam. urbs: not urps; cf. § 58. e) 2). urgeo: not urgueo. utcumque: better than utcunque. utrimque: not utrinque. V. valetudo: not valitudo. vehemēns: in poetry often vēmēns. Vergiliae, Vergilius, Verginius: not Virg-. versus (versum): early Latin vors -. vertex: early Latin vortex. verto: early Latin vorto. vester: early Latin voster. vicesimus: commoner than vigesimus. victima: earlier victuma; § 6. 2. vilicus: not villicus. vinculum and vinclum: § QI. vinolentus and vinulentus. Volcānus: § 57. a). Volscī: § 57. a). Volsiniensis: § 57. a). Volturnus: § 57. a). Vortumnus: under the Empire also Vertumnus; cf. verto.

vulgus: earlier volgus; § 57. a).

vulnus: earlier volnus; § 57. a).

vulpēs: earlier volpēs; § 57. a).

vultus: earlier voltus; § 57. a).

vultur: earlier voltur; § 57. a).

CHAPTER VI.

THE LATIN SOUNDS.

THE VOWELS.1

ABLAUT.

62. The Indo-European parent-speech, from which the Greek. Latin, Sanskrit, Avestan, Slavic, Teutonic, Keltic, Armenian, and Albanian languages are descended, had a vowel system of considerable regularity. By variation of the root vowel, each monosyllabic root was regularly capable of appearing in three different Thus the Indo-European root gen-, 'bring forth,' had also a form gon-, and another form gu-. The different phases in which a root appears are designated as 'grades'; while the general phenomenon of variation is called Ablaut or Vowel Gradation. The different phases of a root taken together form an 'ablautseries.' Six such ablaut-series have been shown to have belonged to the Indo-European parent-speech. Of the three grades belonging to each series two are characterized by a fuller vocalism than the third; these fuller phases of the root are called 'strong' grades; the third by contrast is called the 'weak' grade. Thus gen- and gon-, cited above, represent the strong grades; gn-, which has been weakened by the loss of the e, is the weak grade. The first of the two strong grades gives its name to the series in which it occurs. There are six Indo-European ablaut-series:

¹ See Brugmann, Grundriss, §§ 28-319; Lindsay, Latin Language, chap. iv.; Stolz, Lateinische Grammatik, §§ 7-41; Lateinische Lautlehre, pp. 112-229.

SERIES.	WEAK GRADE.	Strong Grades.	
ā -Series:	$\left\{\begin{array}{c} 9^{1} \\ e.g. \ bhs- \end{array}\right.$	$\left\{ egin{array}{l} ar{\mathbf{a}} \ e.g.\ bhar{a} \end{array} ight.$	ō bhō-
ē-Series:	{ e.g. dh≥-	{ ë e.g. dhē-	ō dhō-
ŏ -Series:	{ • e.g. pa-	{ ō { e.g. pō-	ō <i>p</i> ₹-
ă-Series:	{ Vowel vanishes e.g. g-	{ ă	ā, ŏ
ĕ-Series:	$ \begin{cases} \text{Vowel vanishes} \\ e.g. pt- \\ dyk- \end{cases} $	{ pet- derk-	āg- ŏ pot- dork-
ŏ -Series:	{ Vowel vanishes	{ ŏ ŏd-	ō ōd-

63. The origin of this variation in the form of roots is attributed with great probability to accentual conditions prevailing in the parent-speech. Some uncertainty still prevails concerning details in the various series; but for practical purposes the above scheme is sufficiently accurate (see Brugmann, Grundriss, i. § 307 ff.; Lindsay, Latin Language, p. 253 ff.; Stolz, Lat. Gr., § 15 ff.; Lateinische Lautlehre, p. 157; Johnson's Cyclopaedia, Article Ablaut). Of the different Indo-European languages some have preserved the Indo-European Ablaut with great fidelity; this is notably the case with Greek and Teutonic. In other languages the Ablaut has become much obscured; Latin belongs to the latter class. Most Latin roots appear in only a single grade, the other two grades having disappeared in the course of the development of the language. Yet some examples of the original gradation are preserved. These will be considered according to the different ablaut-series in which they occur.

ĕ-Series.

64. The \(\varepsilon\)-series is by far the best represented of any in Latin; it embraces three sub-types.

¹ ϑ represents an obscure short vowel, which developed variously in the different Indo-European languages, — as \check{a} , \check{e} , \check{i} , \check{o} .

- a) The \check{e} or \check{o} is followed by some consonant which is not a nasal or a liquid, e.g. root dc-, dec-, doc-, seen in $disc\bar{o}$ (for *di-dc-sc \bar{o}); dec-et; doc-e \bar{o} ; root sd-, sed-, sod-, seen in $s\bar{i}d\bar{o}$ (for *si-sd- \bar{o}); sed-e \bar{o} ; sol-ium (for *sod-ium; see § 95. 2). The root es- ('to be') has only the weak grade and one of the strong grades. The weak grade is seen in s-im; s-unt, etc.; the strong grade in es-t; es-se, etc.
- b) The \check{e} or \check{o} is followed by a liquid or nasal. By the loss of the e in the weak grade the liquid or nasal often becomes vocalic, developing according to the principles explained in §§ 100, 102. Thus from the Indo-European root gn-, gen-, gon-, the Latin has $gn\bar{a}tus$ (for $g\bar{\eta}$ -tus; see § 102. 2), and gen-us; no form with gon-has been preserved; gi-gn- \bar{o} , however, shows us another form of the weak grade. From the root mn-, men-, mon-, the Latin has $m\bar{e}ns$ (for mn-t(i)s) and mon- $e\bar{o}$.
- c) The e or o of the strong grades was originally followed by i or u; in the weak grade the e, as usual, disappeared, leaving i or u. Thus originally:

i ei oi u eu ou

But of these diphthongs, ei became $\bar{\imath}$, while the others became $\bar{\imath}$, except that oi (oe) has been retained in a few words. Examples: root fid-, feid-, foid-, seen in fid- $\bar{e}s$; $f\bar{\imath}d\bar{o}$ (for feid- \bar{o}); foed-us (earlier foid-us); root duc-, deuc-, douc-, seen in $d\bar{u}c$ -em, $d\bar{u}c\bar{o}$ (for earlier *deuc- \bar{o}).

Further examples of Ablaut in the \(\vec{c}\)-series are given in Stolz, Lat. Grammatik, p. 263 f.; Lat. Lautlehre, p. 157 ff.; Lindsay, Lat. Language, p. 255.

ē-Series.

65. No root shows all three grades in Latin; ∂ , the obscure vowel, develops variously as \check{a} , \check{i} , \check{e} . The root $dh\partial_{-}$, $dh\bar{e}$ -, $dh\bar{o}$ -, 'place,' 'put,' shows the weak grade in con-d \check{i} -tus, etc., and one of the strong grades in sacer-d \bar{o} -s; fanum (for *fas-num) shows

the weak grade; fēs-tus the corresponding strong grade. Cf. also rā-tus, rē-rī; sā-tus, sē-men.

\bar{a} -Series.

66. The obscure vowel z develops as \underline{a} . The weak grade is seen in fa-teor; the corresponding strong grade in fa- $r\bar{i}$, fama. Cf. also $st\bar{a}$ -tus; $st\bar{a}$ -men, $St\bar{a}$ tor; $r\bar{a}d$ -ere and $r\bar{o}d$ -ere exhibit the two strong grades.

ō-Series.

67. The obscure vowel ∂ appears as \check{a} . The weak grade is seen in $d\check{a}$ -mus, $d\check{a}$ -tus; the corresponding strong grade in $d\bar{o}$ num, $d\bar{o}s$. Cf. also $c\check{a}t$ -us, $c\bar{o}s$ (for * $c\bar{o}ts$).

ă-Series.

68. One form of the strong grade is seen in $ag-\bar{o}$, the other in $amb\bar{a}g\bar{e}s$. The a may combine with i to produce the diphthong ai. An instance of this is seen in aes-tus (for *aid-tus), 'burning heat'; the weak grade of the same root is seen, $\bar{i}d-\bar{u}s$, originally an adjective: 'burning,' 'bright,' with $noct\bar{e}s$ understood, i.e. 'the bright nights' when the moon was full, and so the 15th of the month, 'the Ides.'

ŏ-SERIES.

- 69. Examples of this scantily represented ablaut-series are $f\bar{o}d\text{-}ere, f\bar{o}d\text{-}\bar{i}$, both strong grade. Cf. also $\bar{o}d\text{-}ium, \bar{o}d\bar{i}$; $n\bar{o}s\text{-}ter, n\bar{o}s$.
- 70. Vowel gradation appears not only in roots, but also in suffixes and in case-endings. Thus in nouns of the second declension the suffix varies between e and o, the two strong grades of the ĕ-series. The suffix e is seen in the vocative hort-e, and originally existed in the genitive horti, which is for *hort-e-i; see § 126. The other cases originally had the suffix o, e.g. hortus, hortum, for a primitive hort-o-s, horto-m. Cf. also nouns of the type of genus, generis, originally *gen-os, *gen-es-is, where again the suffixes -es-, -os show us the two strong grades of the ĕ-series.

In case-endings we have an interesting illustration of vowel variation in the genitive ending, which appears both as -ĕs and -ŏs; e.g. ped-is (for *ped-ĕs), senatu-ŏs (early Latin).

VOWEL CHANGES.

Ă.

- 71. \ddot{a} in syllables which were accented at the time of the early Latin accentuation (see § 55) remains unchanged; in syllables which were unaccented at that period, \ddot{a} develops as follows:
- 1. Before two consonants, before r, and in final syllables, \check{a} regularly becomes \check{e} , e.g. acceptus for * \acute{a} ccaptus; particeps for * $p\acute{a}$ rticaps; confectus for * $c\acute{o}$ nfactus; impertio for *impartio; reddere for *reddare; pede, milite, etc. (so-called Ablative, really Instrumental Singular) for *peda, * $m\bar{i}$ lita, etc.
- 2. Before a single consonant in the interior of a word, \check{a} becomes \check{i} , e.g. $adig\bar{o}$ for $*adag\bar{o}$; $concin\bar{o}$ for $*concan\bar{o}$; $\bar{i}nsitus$ for $*\bar{i}nsatus$; redditus for *reddatus.
- 3. Before l+a consonant (but not before ll), \breve{a} becomes \breve{u} , e.g. exsult \bar{o} for *éxsalt \bar{o} ; inculc \bar{o} for *incalc \bar{o} .
- 4. Before labials, \check{a} becomes the sound which was represented by u in the earlier period, and later by i (see § 6. 2), e.g. mancu-pium, later mancipium, for *mancapium.
- 5. Before ng, \check{a} becomes \check{i} (through the medium of \check{e}), e.g. atting \bar{o} for * \acute{a} ttang \bar{o} .

ā.

72. ā regularly remains unchanged in Latin in all situations, e.g. māter; contrāctus for *contrāctus.

ĕ.

- 73. 1. ž is retained in Latin:
 - a) Before r, e.g. fero, confero, sceleris.
 - b) When final, e.g. horte, age, agite.
 - c) Usually before two consonants, e.g. scelestus, obsessus, auspex.

2. ¿ becomes ?:

- a) Before a single consonant in syllables which were unaccented by the early accentuation (§ 55), e.g. colligō for *collegō; mīlitis for *mīlētēs; obsideō for *bbsedeō; prōtinus for *prōtenus.
- b) Sometimes before n or m + a consonant, e.g. simplex for *sem-plex (from sem-, 'one'), vīgintī for *vīgentī; tinguō for *tenguō; quīnque for *quenque (earlier *penque).
- 3. \check{e} becomes \check{o} before v, e.g. novos for an original *nevos (Gr. $v\acute{e}$ cos).

ĕ.

74. ē is regularly retained in Latin in all situations, e.g. rēctus, corrēctus, corrēxī, diē.

ĭ, ī.

75. \tilde{i} and \tilde{i} are regularly retained in all situations, e.g. quis, turribus; $v\bar{i}v\bar{o}$, inclino, except that final - \tilde{i} may become -e, e.g. mare for *mari; sedile for *sedili.

ŏ.

- 76. 1. \check{o} , except in the very earliest stages of the language (prior to 230 B.C.), has regularly become \check{u} in unaccented syllables, e.g. filius, for earlier filios; dōnum for *dōnom; opus for *opos; vehunt for *vehont; contulī for *contolī; sēdulō for *sē dolō. Final syllables in -quos, -quom; -vos, -vom; -uos, -uom, etc., retained the \check{o} to a considerably later period; see § 57. 1. \check{o} was also regularly retained before r, e.g. temporis.
- 2. Before a nasal + a consonant, ŏ also occasionally changes to ŭ, e.g. uncus for a primitive *oncos; umbilīcus for *ombilīcos.

ō.

77. ō regularly remains unchanged in Latin in all situations, e.g. dōnum, victōrēs, licētō.

Ħ.

78. ŭ before labials, became i about the close of the Republic (see § 6. 2), e.g. libet for earlier lubet; lacrima for earlier lacruma; lacibus for earlier lacubus.

ū.

79. \bar{u} is regularly retained in all situations, e.g. $f\bar{u}mus$, conjunctum, etc.

ai.

- 80. 1. In syllables which, under the early accentuation (see § 55), were accented, original *ai* was retained, becoming about 100 B.C. *ae*, which, in turn, late in imperial times, developed into a monophthongal sound; see § 10. 2.
- 2. In syllables which, under the early accentuation (§ 55), were unaccented, original ai became regularly \(\bar{i}\), e.g. inquir\(\bar{o}\) for *inquir\(\bar{o}\); ex\(\bar{i}\)stum\(\bar{o}\) for *exaistum\(\bar{o}\); virt\(\bar{u}\)ti, m\(\bar{i}\)lift, etc., for *virt\(\bar{u}\)-tai, etc.; m\(\bar{e}\)nsis, portis, etc., for m\(\bar{e}\)nsais, etc.

oi.

- 81. I. In syllables which, under the early Latin accentuation (see § 55), were accented, original oi, though retained in the oldest monuments of the language, early passed into \bar{u} , e.g. $\bar{u}tilis$ for oitilis; $\bar{u}nus$ for oinos. In a few words, however, oi was retained and passed into oe, e.g. foedus, moenia; § 11.
- 2. In final syllables, which, under the early accentuation (§ 55), were unaccented, oi became $\bar{\imath}$, e.g. hort $\bar{\imath}$ (Nom. Plu.) for *hortoi; hort $\bar{\imath}$ s for *hortois (§ 86). A trace of -ois is preserved in oloes, for earlier *olois (Festus, p. 19, M.).

ei.

82. It is uncertain whether ei was still a diphthong in the earliest monuments of the Latin language or had already become a monophthong. Certainly the monophthongal value $(\bar{\imath})$ established

lished itself very early, and $\bar{\imath}$ came to be the regular orthography for the earlier ei, e.g. $d\bar{\imath}c\bar{o}$ for $deic\bar{o}$; $f\bar{\imath}d\bar{o}$ for $feid\bar{o}$; $d\bar{\imath}vus$ for deivos, etc.

ui.

83. This diphthong undergoes no changes; see § 14.

au.

- **84.** I. au is regularly retained in syllables which, under the early accentuation (§ 55), took the accent, e.g. $a\dot{u}r\bar{o}ra$, claudō. In the speech of common life this au had a tendency to become an open \bar{o} (later close), and in some words this colloquial pronunciation even established itself permanently in the literary language. Examples are: $Cl\bar{o}dius$ for Claudius; $pl\bar{o}d\bar{o}$, in $expl\bar{o}d\bar{o}$, $impl\bar{o}d\bar{o}$, etc.
- 2. In syllables which, under the early accentuation (§ 55), remained unaccented, au regularly became \bar{u} , e.g. $incl\bar{u}d\bar{o}$ for *inclaudo; $d\bar{e}fr\bar{u}d\bar{o}$ for *défraudo.

eu and ou.

85. Primitive Latin eu and ou are nowhere preserved in the existing monuments of the Latin language. eu first became ou (seen in early Latin $douc\bar{o}$ for $*deuc\bar{o}$), and subsequently developed to \bar{u} , e.g. $d\bar{u}c\bar{o}$, $l\bar{u}ce\bar{o}$. Original ou became \bar{u} directly.

SHORTENING OF LONG DIPHTHONGS.

- **86.** The name 'long diphthong' is given to diphthongs whose first element consisted of a long vowel. \bar{Ai} , \bar{oi} , \bar{ei} , \bar{eu} , \bar{au} , \bar{ou} existed in the parent-speech; of these \bar{ai} , \bar{au} , and \bar{oi} were inherited by the Latin in a few instances and developed as follows:
- a) In the interior of a word before a consonant, the long diphthongs suffered shortening of the first element, e.g. *hortŏis (for *hortōis), whence horfīs (see § 81. 2); gaudeō for *gāudeō (cf. gāvīsus); năufragus for *nāufragus (cf. nāvis).



b) When final, $\bar{a}i$ and $\bar{o}i$ probably became $\check{a}i$ and $\check{o}i$ before an initial vowel, but \bar{a} and \bar{o} before an initial consonant. Thus, in the Dative Singular of \bar{a} -stems (primitive termination $-\bar{a}i$), we should originally have had *port\bar{a}, for example, before consonants, portăi before vowels. The ante-vocalic form portai (portae; § 80. 1) ultimately established itself as the sole inflection. Yet in early Latin, we find traces of the ante-consonantal form, e.g. MATVTA, CIL. i. 177. In the Dative Singular of o-stems (primitive termination $-\bar{o}i$) the ante-consonantal form prevailed, e.g. populō. Yet, in the earliest Latin inscription (CIL. xiv. 4123), we find Nymasioi, the ante-vocalic form.

RE-COMPOSITION AND DE-COMPOSITION.

87. 1. The principles laid down in the foregoing sections for the change of vowels and diphthongs in the (originally) unaccented syllables of compounds often seem to be violated. Thus appetō, expetō, intellegō, neglegō occur where the law demands *appitō, *expitō, negligō, intelligō. These apparent irregularities are in reality not due to any violation of the law, but are the result of 'Re-composition,' i.e. the identity of the simple verb was so keenly felt that the language restored it in the compound, thus replacing the regular *appitō, intelligō, etc., with appetō, intellegō, etc. Other instances of the same kind are exaequō, conclausus, exquaerō, where phonetic laws would demand *exīquō, conclūsus, exquārō.

Many compound words are also naturally much later than the operation of the laws above referred to.

- 2. Sometimes the form taken by a verb in composition occurs instead of the original form, e.g. clūdō for claudō, after inclūdō, etc.; plicō for plecō after implicō, etc. This process may be called 'De-composition.'
- 3. Re-composition and De-composition manifest themselves not only in connection with vocalic changes, but also in connection with many of the consonantal changes enumerated in the

following sections. Cf. e.g. $tr\bar{a}nsd\bar{u}c\bar{o}$ as an illustration of Recomposition. The phonetic form is $tr\bar{a}d\bar{u}c\bar{o}$, which also occurs. Cf. also sescenti (the phonetic form; § 105. 1), but sexcenti (Recomposition).

SHORTENING OF LONG VOWELS.

- 88. 1. A group of some twenty words exhibits shortening of an accented long vowel, with compensatory doubling of the following consonant, viz. Jüppiter (for earlier Jūpiter), cuppa, littera, muccus, succus, hallūcinārī, parricīda, bacca, gluttus, giuttīre, bucca, damma, muttīre, stuppa, futtilis, Messalla, braccae, puppa, allium, stelliō, strenna, helluō, culleus, pilleus. Many of these words often appear in MSS., texts, and inscriptions, written with a single consonant; that represents the earlier spelling. The orthography of the Augustan Age has two consonants.
- 2. The vowel was regularly shortened in final syllables in m and t; also in the original $-\bar{a}r$ and $-\bar{e}r$ of Passive forms; and in the Nominative endings $-t\bar{e}r$, $-t\bar{o}r$, $-s\bar{o}r$, $-\bar{o}r$, $-\bar{a}l$, $-\bar{a}r$.
- 3. Words of original iambic form, e.g. mihī, fibī, sibī, modō, citō, cedō, often suffered permanent shortening of the ultima, giving mihī, tibī, modō, cedō, etc. The name of 'Breves Breviantes' ('shorts shortening') has been given to this process.

COMPENSATORY LENGTHENING.

89. In accented syllables, an s before a voiced consonant is often dropped with lengthening of a preceding short vowel, e.g. sīdo for *si-sd-ō; querēla for *queresla; egēnus for *egesnos. Often the consonantal group contains other consonants before the s, which first disappear (in accordance with § 105. 1), e.g. āla for *acsla; rēmus for *retsmos; scāla for *scantsla; tēmō for *tēcsmō. This lengthening of the short vowel in compensation, as it were, for an omitted consonant, is designated 'compensatory lengthening.'

Assimilation of Vowels.

90. Vowels are occasionally assimilated to each other in successive syllables, e.g. nihil for *nehil; nisi for *nesi; sobolēs for subolēs; rutundus (chiefly in poetry) for rotundus; tugurium for *tegurium (tegō); purpura for πορφύρα; and in reduplicated perfects, e.g. momordī for memordī; totondī for tetondī; pupugī for pepugī; etc. Assimilation is mainly restricted to short vowels, but possibly we should recognize the assimilation of a long vowel in fīlius, lit. 'suckling,' for *fē-lius, root dhē-; in suspīciō for *suspēciō (root spec-); subtīlis for *subtēlis (tēla).

Parasitic Vowels.

91. In the immediate environment of a liquid or nasal, a parasitic vowel sometimes develops. Thus, especially in the suffixes -tlo-, -blo-, -clo-, which become -tulo-, -bulo-, -culo-, e.g. in vitulus, stabulum, saeculum; yet the original forms continued in use in the colloquial language and in poetry, e.g. saeclum, vinclum. Further examples are famulus (for *famlos); populus for *poplos; and several words borrowed from the Greek, e.g. Aesculāpius (᾿Ασκληπιός); mina (μνᾶ); drachuma (δραχμή).

Syncope.

92. In early Latin a short vowel following an accented syllable was often dropped. Illustrations of this are: auceps for *aviceps; auspex for *avispex; $\bar{a}rdor$ for * $\bar{a}ridor$; $redd\bar{o}$ for $re-d(i)d\bar{o}$; aetās for aevitās; $pr\bar{u}d\bar{e}ns$ for * $pr\bar{o}v(i)d\bar{e}ns$; $vald\bar{e}$ for $valid\bar{e}$; officina for *op(i)ficina; anceps for amb(i)-ceps. Syncope in final syllables is seen in ager for *agr(o)s, *agrs, *agr, etc., and $\bar{a}cer$ for $\bar{a}cris$, * $\bar{a}crs$, * \bar

APOCOPE.

93. 1. Final ž and ž often disappear, e.g. et (for *eti; Gr. čri), aut (for *auti); quot, tot (for *quoti, *toti; cf. toti-dem); ob for *obi; and in neuter i-stems, e.g. animal for *animāli; calcar

for *calcari. But dissyllabic i-stems change -i to -e, e.g. mare for *mari.

2. Final \check{o} disappears in ab, for an original *apo (Gr. $\mathring{a}\pi\acute{o}$); and sub for *supo (cf. Gr. $\mathring{v}\pi\acute{o}$). On the change of p to b, see § 96. 1.

THE CONSONANTS.1

THE MUTES.

The Palatal and Guttural Mutes, c, q, g.

- **94.** I. There were two series of k and g-sounds in Indo-European, the former designated as 'Palatals,' the latter as 'Velars.' The Palatals were formed further forward in the mouth, and developed in most languages as k (in Latin regularly as k (c), rarely as q; in Sanskrit and Slavic as sibilants, s, sh, etc.). The Velars were formed further back in the throat, and fall into two subdivisions:
- a) The Velars of the first type develop in all languages as plain gutturals, -k, g.
- b) The Velars of the second type develop with labialization, i.e. they have a parasitic w-sound after the k or g. Latin represents these sounds respectively by qu and gu.
 - 2. Examples of the different Gutturals are:

Palatals: centum, dīcere, socer; agō, genū, argentum.

qu for c appears in queror, queo, equos (cf. Skr. áçvas), but never gu for g.

Velars:

- a) Without Labialization: cavere, canere; grus, gelu, tego.
- b) With Labialization: quis, quī, etc.; sequor; -que; -linquō; stinguō, unguen. Before u or a consonant, qu appears as c, e.g.

¹ See in general Brugmann, Grundriss, §§ 320-598; Lindsay, Latin Language, chap. iv.; Stolz, Lateinische Grammatik, §§ 42-61; Lateinische Lautlehre, pp. 232-291.

- stercus (cf. sterquilinium), arcus (cf. arquitenens); -līctus (cf. -linquē). When initial, gu (i.e. gv) loses the g and becomes v, e.g. (g) venīre, (g) vīvos, (g) vorāre.
- 3. -cn- and -cm- occasionally develop as gn and gm, e.g. salīgnus from salix (root salic-); dīgnus for *dec-nus; sēgmentum for *sec-mentum (sec-ō).

The Dental Mutes, t, d.

- 95. 1. t regularly appears as t, but in the Indo-European suffix -tlo-, t became c, e.g. piāclum (whence piāculum) for *piātlom; saeclum (saeculum) for *saetlom; vinclum, etc. Sometimes this -clo- subsequently (by dissimilation; see § 110) developed to -cro-, when a preceding syllable had l, e.g. lavācrum for *lavāclom, *lavātlom; in quadrāgintā, quadringentī, d has not developed from t; quadr- probably represents a different word; see § 183. 13.
- 2. d is regularly retained, but becomes l in a few words, e.g. lacruma for dacruma (preserved in Ennius); lingua for early dingua (helped perhaps by association in the folk-consciousness with lingere, 'lick'); solium for *sod-ium (Ablaut of sed-; see § 64. a); levir for *devir (Gr. $\delta \bar{a}(\rho) \dot{\eta} \rho$).

The Labial Mutes, ρ and b.

96. I. p regularly remains unchanged; but in the prepositions ab, ob, sub, b has developed from an earlier p. The original forms of these words were *apo (Gr. $a\pi b$), *op-i (in Ablaut relation to Gr. $a\pi b$); ap- $a\pi b$ 0 (Gr. $a\pi b$ 0). By loss of the final vowel these became *ap, *op, *sup (cf. sup-er, suprā); ap- and op- are probably to be recognized in aperiō and operiō; but before voiced consonants the p of ap, ap, and ap- ap-

2. b, as the descendant of Indo-European b, is by no means a frequent sound in Latin, particularly initial b. Examples are baculum, balbus, brevis; lūbricus, labrum. On the late development of intervocalic b to a spirant, see § 16. 2.

The Indo-European Aspirates in Latin.

97. In the Indo-European parent-speech the aspirates were almost exclusively voiced, *i.e. bh, dh, gh* (both palatal and velar); *ph, th, ch* were extremely rare. These voiced aspirates developed in Latin as follows:

1. Indo-European bh became:

- a) f at the beginning of words, e.g. fāgus (for *bhāgos; Gr. φηγόs); fā-rī (root bhā-; Gr. φημί); fu-ī (root bhu-; Gr. φύω); fer-ō (root bher-; Gr. φέρω).
- b) b in the interior of words, e.g. ambō (for *ambhō; Gr. ἄμφω); orbus (root orbh-; Gr. ὀρφανός); mor-bus (suffix -bho-).

2. Indo-European dh became:

- a) f at the beginning of words, e.g. fūmus (for *dhūmos;
 Gr. θυμός); fēmina (root dhē-; Gr. θη-λυς); forum (root dhor-).
- b) Usually d in the interior of words, e.g. medius (for *medhios; cf. Gr. μέσσος for *μεθιος); aedēs, 'fire-place,' 'hearth' (root aidh-; Gr. αΐθω, 'burn'); viduus (root vidh-); but
- c) b in the interior of words, if an environing syllable contains r, e.g. ūber (root oudh-; Gr. οὖθαρ); rubro-(root rudhro-; Gr. ἐρυθρός); and in the suffixes -bro-(for -dhro-; Gr. θρο-), e.g. crī-brum. Similarly before l in the Indo-European suffix -dhlo- (Gr. -θλο-), dh becomes b, e.g. stabulum (with -bulum for -blum; see § 91).

- 3. Indo-European gh. Here we must distinguish palatal and velar gh.
 - A. Palatal gh. This became:
 - a) h, when initial or between vowels in the interior of words, e.g. hiems (root ghim-; Gr. χειμών); holus (root ghol-); vehō (root vegh-); ānser (root ghāns-) has lost the initial h; see § 23.
 - b) g after n, e.g. $fing\bar{o}$ (root dheigh-, with the infix n).
 - c) f before u, e.g. fu- $nd\bar{o}$ (root gheu-).
 - B. Velar gh.
 - a) Unlabialized velar gh becomes regularly h, but g before r, e.g. hostis (for *ghostis); pre-hendō (root ghend-); gradior (for *ghrad-).
 - b) Labialized velar gh becomes, -
 - 1) f, when initial, e.g. formus (for *ghormos).
 - 2) gu after n, e.g. ninguit (root (s) nigh-, with infix n).
 - 3) v between vowels, e.g. nivis, nivī, etc. (root snigh-).

THE SPIRANTS, s, f, h.

98. 1. s is the most important of the spirants, as regards phonetic changes. An original s regularly became r between vowels ('Rhotacism'), e.g. $ger-\bar{o}$ for *ges- \bar{o} (cf. $ges-s\bar{i}$, ges-tus); dirim \bar{o} for *dis-em \bar{o} (cf. distingu \bar{o}); temporis for *tempos-is (cf. tempus); portarum for *portasom. This change took place within the historical period of the language. It had been consummated before the close of the fourth century B.C. But the grammarians retained the tradition of the earlier forms, and often cite such words as arbosem, $p\bar{i}gnosa$, etc. This change of s to r sometimes seems to occur before v, e.g. $l\bar{a}rva$ (root las-). But this is only apparent; v in such cases is secondary, having developed from u, so that the rhotacism is regular: $l\bar{a}r-u-a$ (for

- *las-u-a); cf. Lar-es (for Lases); fur-u-os (for *fus-u-os; cf. fus-cus); Mener-u-a (for *Menes-u-a); la-ru-a and Miner-u-a are both found in Plautus.
- 2. Wherever s appears between vowels in the classical language it is a result of the reduction of ss after a long vowel or a diphthong, e.g. mīsī for mīssī (i.e. *mīt-sī); suāsī for suāssī (i.e. *suādsī); haesī (for haes-sī); causa for caussa; dīvīsiō for dīvīssiō.

The forms with double ss were current in Cicero's day (cf. Quintilian i. 7. 20), and occur occasionally in inscriptions much later; after short vowels ss was, of course, always retained, e.g. fissus, scissus, etc.

- 3. In a few cases intervocalic s appears to have resisted rhotacism, e.g. basium, miser, caesaries. Possibly the s was retained in miser and caesaries as a result of dissimilation (§ 110), i.e. in order to avoid *mirer, *caeraries.
- 4. By analogy, the r resulting from rhotacism sometimes crept into the Nominative from the oblique cases, e.g. honor (originally $hon\bar{o}s$) after $hon\bar{o}ris$, $hon\bar{o}r\bar{i}$ (originally *hon $\bar{o}sis$, etc.).
 - 5. For the omission of the spirant h, see § 23.

THE LIQUIDS, I, r.

The Liquids as Consonants.

99. 1. As consonants, the Latin liquids exhibit few peculiarities. Their most important feature is a tendency toward dissimilation, as a result of which l changes to r, or r to l, to avoid the repetition of l or r in successive syllables. Examples are seen in the suffixes $-\bar{a}ri$ -, -cro-, for $-\bar{a}li$ -, -clo- (from -tlo-; see § 95. 1), e.g. exemplāris (to avoid *exemplālis); lucrum (to avoid *luclum). So caeruleus is for *caeluleus (caelum). Sometimes r disappears altogether as a result of the tendency to avoid two r's in successive syllables, e.g. praestigiae for praestrigiae (praestring \bar{o}); sempiternus for *sempe(r)-ternus.

The Liquids as Sonants.

- 100. In the Indo-European parent-speech, whenever roots which, in their strong grades, contained el, ol; er, or, became reduced to the weak grade (see § 64. b), the l or r (by the disappearance of the e or o) became sonant, i.e. endowed with vocalic character, usually indicated by l, r. English has these sounds in botl (written bottle); centr (written centre), etc. These Indo-European sonant liquids developed in Latin as follows:
- 1. ℓ developed regularly as $u\ell$, sometimes as $o\ell$, e.g. pulsus (for an Indo-Eur. * $p\ell$ - $t\delta s$; root $pe\ell$ -); -cultus in oc-cultus (for an Indo-Eur. * $c\ell$ - $t\delta s$; root $ce\ell$ -); $tol\ell\bar{o}$, i.e. *tol- $n\bar{o}$ (for * $t\ell$ - $n\bar{o}$, root $te\ell$ -).

Sometimes the sonant l was long in quantity and then developed as al or $l\bar{a}$, e.g. salvus for $*s\bar{l}$ - $v\delta s$; $l\bar{a}na$ (i.e. $*vl\bar{a}na$) for $*v\bar{l}$ - $n\acute{a}$, from root vel-; ef. vel-lus; $l\bar{a}tus$ (i.e. $*tl\bar{a}tus$; § 104. I a), from root tel-.

2. r developed regularly as or or ur, e.g. curvus (for *crvos, root cerv-; cf. cerv-īx); porta (for *pr-tá, root per-; cf. Gr. πείρω, for *πέρ-ιω); curtus (for *cr-tos, root cer-; cf. Gr. κείρω for *κέρ-ιω).

Like the sonant l, the sonant r was sometimes long in quantity. It then developed as ar or $r\bar{a}$, eg. armus (for $\bar{r}m\dot{o}s$); $str\bar{a}tus$ (for * $st\bar{r}$ - $t\dot{o}s$; root ster- in $stern\bar{o}$); $cr\bar{a}tis$ (for * $c\bar{r}$ -tis).

3. In certain instances a sonant r arose in Latin itself. This sonant r developed differently from the Indo-European r above described, regularly becoming er. Thus in the Nominative Singular of ro-stems, ager, for example, was originally *agros; by Syncope (see § 92) *agros became *agrs, whence by assimilation *agr(r), and by development of r to er, ager. Similarly, stems in -ris developed an er in the Nominative Singular. Thus $\bar{a}cris$ gave first * $\bar{a}crs$, then * $\bar{a}cr$, whence $\bar{a}cer$. Other instances of the same change are libertas for *libr-tas (root libro-), acerbus for *acr-bus; acerbus for *acr-bus; acerbus for *acr-bus; acerbus for *acr-acerbus for *acr-a

THE NASALS, m, n.

The Nasals as Consonants.

- 101. As consonants the Latin nasals exhibit few peculiarities.
- 1. Before j, m became n, e.g. venio for *gemjo (with labio-velar g; § 94. 1); quoniam for *quomjam.
- 2. On the tendency of m to disappear before labials, and n before dentals, see § 20. 2-4.

The Nasals as Sonants.

- 102. In the Indo-European parent-speech, whenever roots which, in their strong grade, contained em, om; en, on, became reduced to the weak grade (see § 64. b), the m or n (by the disappearance of the e or o) became sonant, i.e. endowed with vocalic character, usually indicated by m, n. English has these sounds in butn (written button), rhythn, etc.
- 1. These Indo-European sonant nasals developed in Latin regularly as em and en, e.g. septem (for *septm); decem (for *decm); ped-em, mīlitem, etc., for *pedm, mīlitm, etc.; memento for *me-mn-tod; tentus for *tn-tos (root ten-); and in the suffix -men for -mn, e.g. nomen.
- 2. Like the liquid sonants (see § 100. 1, 2) the nasal sonant n is sometimes long, and then develops as an or $n\bar{a}$, e.g. antae for $*\bar{n}$ tae; $gn\bar{a}$ -tus (for $*g\bar{n}$ -tós; root gen-); $gn\bar{a}$ -rus (for $*g\bar{n}$ -rós).

The Semi-vowels j, v.

- 103. 1. Primitive intervocalic j regularly disappeared, e.g. ea for *eja; eō for *ejō; trēs for *tre-es (i.e. *trejes); moneō, etc., for *monejō.
- 2. When following a consonant, primitive j became i, e.g. venio for *venjo; capio for *capjo; medius for *medjos.
- 3. Intervocalic v also often disappears, e.g. $c\bar{o}nti\bar{o}$ for $co(v)enti\bar{o}$; $l\bar{a}tr\bar{i}na$ for $*la(v)\bar{a}tr\bar{i}na$; $n\bar{o}l\bar{o}$ for $*ne(v)ol\bar{o}$; $j\bar{u}cundus$ for

-ju(v) icundus; $j\bar{u}nior$ for *juvenior. Yet this law does not affect all instances of intervocalic v.

4. av and ov in unaccented syllables regularly became u, e.g. domu \bar{i} for *dómav \bar{i} ; ablu \bar{o} for *áblav \bar{o} ; d \bar{e} nu \bar{o} for d \bar{e} nov \bar{o} ; implu \bar{o} for *implov \bar{o} ; indu \bar{o} for *indov \bar{o} ; suus and tuus for earlier sovos and tovos, owing to their frequent enclitic (unaccented) use.

CONSONANT CHANGES.1

INITIAL COMBINATIONS.

- 104. r. Initial consonant combinations often drop the first consonant. Thus:
 - a) Mute lost:
 - p in tilia for *ptilia (Gr. πτελέα); sternuō for *psternuō.
 - 2) t in lātus for *tlātus (root tel-); d in Jū-piter for
 *Djeu-pater (cf. Gr. Zevs for *Διευς).
 - 3) g in lac for *glact (cf. γάλακτος), also in nātus for gnātus; nōtus for gnōtus; yet the g appears in the archaic language and in compounds, e.g. ignōtus (for *ingnōtus); cognātus (for *con-gnātus). By analogy cognōmen takes a g (for *comnōmen).
 - b) s lost:
 - before mutes: in caedō for *scaidō (cf. sci(n)dō);
 triō for *striō (root ster-); torus for *storus (root ster-, stor-; cf. ster-nō, stor-ea, 'mat'); tegō for *stegō (cf. στέγω); further, in līs, locus, lātus, 'broad,' for stlīs, stlocus, stlātus. Early Latin still has stlocus (e.g. CIL. v. 7381) and stlātus, while stlīs is regularly used in the phrase Xvirī stlītibus jūdicandīs. Cf. also Quintilian, i. 4. 6.

¹ See especially Stolz, Lateinische Grammatik, §§ 62-69; Lateinische Lautlehre, pp. 295-334.

- 2) Before liquids and nasals: in *lubricus* for *slubricus; ninguit, nix (for *sninguit, *snix); mīrus for *smīrus.
- c) v lost in lāna for *vlāna; rādīx for *vrādīx.

2. Other initial changes:

- a) st stands for an initial sp in stud-eō (cf. Gr. σπεύδω).
- b) sve-becomes so- in soror for *sve-sor; socer for *svecros; somnus, i.e. *sop-nus, for *svepnos. But sv- is retained in suā-vis, suādeō, suēscō; while it develops as s in sex (for *svex), and sī for enclitic *svai (cf. Oscan svai).
- c) dv- becomes b in bellum (and derivatives); in bonus and bis (earlier dvis; cf. Gr. δίς for *δρις); bīmus for *dvi-him-us, 'of two winters.' The early forms dvellum, dvonōrum are preserved in inscriptions, and as archaisms in the poets.

CONSONANT CHANGES IN THE INTERIOR OF WORDS.

105. Simplification of Compound Consonant Groups.— r. In the case of groups of three or more consonants, one or more were regularly dropped in the formative period of the language to facilitate pronunciation. Examples are: suscipiō for *subscipiō; asportō for *abs-portō; ostendō for *obs-tendō; misceō for *mig-sceō (cf. Gr. μίγ-νυμι); discō for *di-dc-scō; illūstris for *illūc-stris; suēscō for *suēdscō; ecferrī for *ecs(ex)ferrī; pāstus for *pāsctus; mulsī for *mulg-sī; ultus for *ulctus; quīntus for *quīnctus; ārsī for *ārdsī; tortus for *torctus; ursus for *urc-sus; sparsī for *spargsī; bimēstris for *bimēns-tris; poscere for *porcscere; Tuscus for *Turscus (cf. Umbrian Turskum); alnus for *alsnus; fulmentum for *fulc-mentum; urna for *urc-na (cf. urc-eus), quernus for *querc-nus.

Here also belong such compound forms as ignosco for *ingnosco; cognosco for *congnosco; agnosco for adgnosco.

- 2. Often such simplification is merely preliminary to further changes, regularly so when the groups sl, sm, sn arise. Compensatory lengthening (§ 89) then takes place, e.g. pīlum, 'mortar,' for *pinslum, *pislum; āla for *acsla, *asla. The preposition ē as a 'by-form' of ex arose in this way, e.g. ēligō, ēnormis for *ecsligō, *esligō; *ecsnormis, *esnormis; after ē became established in compounds, it came to be used separately. So also trā- arose, e.g. trādūcō for trānsdūcō, *trāsdūcō. Trānsdūco is the result of 'Re-composition' (§ 87. 3).
- 3. Where two of three consonants in a group are a mute and a liquid, owing to facility of pronunciation, simplification does not take place, e.g. astrum, antrum. Other groups easy of pronunciation are sometimes preserved, e.g. sculpsī, serpsī, planxī, though these may be due to analogy. Compounds like trānscrībō, trānsportō, which are much later than the formative period of the language, are not to be regarded as exceptions.

ASSIMILATION.

- 106. 1. Assimilation is designated as 'regressive' when the first of two consonants is assimilated to the second, 'progressive' when the second is assimilated to the first.
 - 2. By regressive assimilation the following changes take place:

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be to ce, e.g. occurro.
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bg to gg, e.g. suggerō.

bf to ff, e.g. suffero.

bp to pp, e.g. supporto.

dc to cc, e.g. accurro.

dg to gg, e.g. aggerō.

dl to ll, e.g. sella (*sed-la); lapillus (*lapid-lus).

dn to nn, e.g. mercennarius for *merced-narius.

ds to ss, e.g. jussus for *jud-sus (root judh-).

dp to pp, e.g. apporto.

te to ce, e.g. siccus for *sit-cus (cf. sit-is).

ts to ss, e.g. quassī for *quatsī.

pm to mm, e.g. summus for *sup-mus.

- pf to ff, e.g. officina for *opficina, i.e. *opi-ficina; see § 92.
- nm to mm, e.g. gemma for *gen-ma, i.e. 'sprout' (root gen-).
- nl to ll, e.g. $\bar{u}llus$ for $*\bar{u}nlus$, i.e $*\bar{u}nulus$; see § 92.
- ns sometimes to ss, which was later simplified to s, e.g. in adjectives in -ōsus. The earlier form was formōnsus, etc., whence formōssus (cf. § 98. 2), formōsus.
- rl to ll, e.g. stella for *ster-la; agellus for *ager-lus (see § 100. 3); paullus for *paur-lus (cf. Gr. παῦρος).
 - 3. By progressive assimilation the following changes occur:
- ld to ll, e.g. mollis for *moldis. Assimilation affects only a primitive ld; in valdē (= validē; § 92), for example, the ld remains unchanged.
- In to *ll*, e.g. pellis for *pelnis; In resulting from Syncope (§ 92), as in *ūlna* for **ūlena*; volnus for *vol-inus, is not affected by this change.
- Is to ll, e.g. velle for *velse; facillumus for *facilsumus.
- rs to rr, e.g. ferre for *fer-se; torrere for *tors-ere. Secondary rs, for rtt, as in versus for *verttos (see § 108. 1) generally remained unchanged, but in the colloquial language such an rs sometimes became ss or s, e.g. prossus, prosus for prorsus (i.e. proversus).
- 4. Partial Assimilation. Sometimes assimilation is only partial. Thus:
 - a) A labial nasal may become dental, or a dental nasal may become labial, owing to the influence of the following mute, e.g. centum for *cemtum; ventum for *vemtum (root gem-); con-tendo for *com-tendo, etc., whence

arose con- as a separate form of the preposition com-.

b) A voiced mute may become voiceless before a following voiceless sound, e.g. āc-tum (for *āg-tum); scrīp-sī for *scrībsī. c) The labial mutes p and b are changed to the corresponding nasals before n, e.g. somnus for *sop-nus (earlier *suep-nos; § 104. 2. b); Samnium for *Sab-nium (cf. Sabīnī); antemnae for *ant-ap-nae; lit. 'opposite fastenings,' — hence 'yards.'

METATHESIS.

107. Metathesis or transposition is perhaps to be recognized in $fund\bar{o}$ for * $fud-n\bar{o}$; unda for *ud-na; $pand\bar{o}$ for * $pat-n\bar{o}$; and $tend\bar{o}$ for * $te-tn-\bar{o}$ (reduplicated present).

OTHER CONSONANT CHANGES.

- 108. 1. An original dt or tt became ss, e.g. sessus for *sed-tus; passus for *pat-tus. After a long vowel or diphthong such an ss became s in the Augustan era, though retained in Cicero's time (§ 98. 2), e.g. $\bar{u}sus$, earlier $\bar{u}ssus$, for * $\bar{u}ttus$; $d\bar{v}v\bar{s}us$, earlier $d\bar{v}v\bar{s}sus$, for * $d\bar{v}v\bar{u}ttus$. In such forms as $l\bar{a}p$ -sus, pulsus, nexus (= nec-sus), $f\bar{\iota}xus$, s has not developed phonetically, but has simply been borrowed from words like sessus, $f\bar{\iota}sus$, etc. When followed by r an original dt or tt became st (instead of ss), e.g. claustrum for *claud-trum; pedestris for *pedettris. In syncopated forms and compounds, dt simply became tt, e.g. cette for *ced-ate (cf. cedo), attendō; i.e. these forms belong to a period in which the change of dt, tt to ss was no longer operative.
- 2. Between m and l, a parasitic p developed, e.g. exemplum for *exemlom; templum for *tem-lom. Such a p developed also between m and s in $s\bar{u}mps\bar{s}$, contemps \bar{s} , and between m and t in $\bar{e}mptus$ and contemptus; hiems did not develop this p; the phenomenon apparently was confined to accented syllables.
- 3. An original -sr- became br. The steps in this change were first from sr to br (b = Eng. th), then to fr, whence br. Examples are: $sobr\bar{\imath}nus$ for *sosr- $\bar{\imath}nus$ (*sosr- from *sosor, earlier form of soror; see § 104. 2. b); tenebrae for *tenesrae; membrum for

- *memsrom; funebris for *funesris (cf. funes-tus); muliebris for *muliesris (cf. mulier-is for *mulies-is; § 98. 1).
- 4. For the disappearance of s before l, m, n, r, b, d, g in accented syllables, combined with lengthening of a preceding short vowel, see § 89. In unaccented syllables s, in such cases, was lost without affecting the quantity of the previous vowel, e.g. $v\bar{u}d\bar{u}mus$ for * $v\bar{u}d\bar{u}smus$; corpulentus for *corposlentus; satin for satisne; pôtin for potisne.

CONSONANT CHANGES AT THE END OF WORDS.

- 109. 1. Single consonants are usually retained. Final s does not become r phonetically, but is changed after the analogy of the r arising by rhotacism in the oblique cases; see § 98. 4. Final n in the Nominative Singular of n-stems, disappeared prior to the existence of Latin as a separate language, e.g. in $hom\bar{o}$ for $hom-\bar{o}(n)$; $*car\bar{o}(n)$, etc. After a long vowel or a diphthong, final d is found in early inscriptions, but disappeared toward the close of the archaic period. Examples are: Ablatives Singular of the first and second declension, e.g. praed \bar{a} for praed \bar{a} ; Gnaiv \bar{o} for Gnaiv $\bar{o}d$; also certain Adverbs and Prepositions, e.g. extr \bar{a} , supr \bar{a} , etc.; pr \bar{o} for pr $\bar{o}d$ -, which latter appears in pr $\bar{o}d$ esse. So also $s\bar{e}$ for $s\bar{e}d$ -, which latter appears in $s\bar{e}d$ it \bar{o} .
- 2. Geminated consonants are not written at the end of a word; thus as for *ass (cf. as-sis); so fel for *fell, i.e. *fels (§ 106. 3); far for *farr, i.e. *fars (§ 106. 3); yet it is probable that geminated consonants were spoken in these words, e.g. hocc (for *hodc), not $h\bar{o}c$; so ess, 'thou art,' farr, fell, ass.
- 3. Groups of two consonants at the end of a word are simplified, -
- a) By dropping the second, e.g. mel for *melt; lac for *lact; os for *ost; cor for *cord. In fers, fert, volt, est, the final consonant is retained after the analogy of agis, agit, etc. A regular exception to the general principle is seen in final ps and x, e.g. ops, urbs (bs = ps; see § 27); $r\bar{e}x$, $l\bar{e}x$.

- b) By dropping the first, e.g. miles for *milets; pes for *peds; and in final syllables in -ns, as agres for *agrens; turris for *turrins.
- 4. Final -nts, -nds, -rts, -rds, -lts lost the t, e.g. $m\bar{o}n(t)s$, $fr\bar{o}n(d)s$, concor(d)s, ar(t)s, pul(t)s. Final -nx, -lx, -rx are permitted, e.g. lanx, falx, merx.

DISAPPEARANCE OF SYLLABLES BY DISSIMILATION.

110. By a natural tendency, when two syllables began with the same consonant, the first syllable was often dropped, e.g. debilitare for *debilita-tare; calamitosus for *calamitatosus; dentio for *dentitio; portorium for *portitorium; veneficus for *venenificus; voluntarius for *voluntatarius; semodius for *sēmi-modius.

CHAPTER VII.

INFLECTIONS.

Declension of Nouns and Adjectives.1

Ā-Stems.

- 111. In the Indo-European parent-speech there was Ablaut (§ 62) in the suffix of \bar{a} -stems. The weak grade of \bar{a} , viz. \bar{a} (§ 66) occurred in the Vocative Singular, and also in the Nominative and Accusative Dual, if Brugmann's theory be correct; see § 120. Elsewhere the suffix remained \bar{a} .
- 112. Nominative Singular. 1. The original Nominative Singular had $-\bar{a}$, e.g. *portā. But $-\bar{a}$ was shortened to $-\check{a}$ before the beginning of the historical period. Possibly this shortening was owing to the influence of the Accusative Singular, where *- $\bar{a}m$ regularly became shortened to $-\check{a}m$ (§ 88. 2). The relation of the Nominative to the Accusative in o-stems, u-stems, and i-stems might easily have led to such shortening. Cf. the following proportional representations:

Possibly the law of Breves Breviantes (§ 88. 3), by which *fūgā, *fērā, *rŏtā, etc., regularly became fūgā, fērā, rŏtā, etc., led to the

¹ See, in general: Brugmann, Grundriss, ii. §§ 184-404; Lindsay, Latin Language, chaps. v. and vi.; Stolz, Lateinische Grammatik, §§ 75-88.

extension of $-\bar{a}$ for $-\bar{a}$ to all Nominatives. Either one or both of these influences may have operated to produce the shortening of final \bar{a} .

- 2. The Latin has developed a number of Masculine ā-stems, e.g. agricola, 'farmer' (probably originally 'farming'); cf. optiō m., 'centurion's assistant,' from optiō, f., 'choice, selection.' Other languages exhibit this same phenomenon, e.g. Greek. Thus νεα-νίᾶς, 'a youth,' probably goes back to a lost *νεανίᾶ, 'youth' (abstract), the -s being appended to indicate the Masculine signification; so further many Greek Masculines in -ās, -ηs. The mediaeval Latin word bursa, f., meant 'company of students,' but subsequently became individualized to mean 'a student' (German Bursche); so camerāta, f., 'roomful of comrades,' later 'comrade' (German Kamerad). Cf. also English justice (the quality) and justice ('magistrate'); Spanish justicia, by change of gender, also covers these two senses.
- 113. Genitive Singular. The ending of the Genitive Singular in Indo-European was -s, -es, -os, the different forms representing Ablaut (§ 64. a), as the result of varying accentual conditions of the parent-speech. In the case of \bar{a} -stems, the case-ending had already united with the \bar{a} of the stem producing the contraction $-\bar{a}s$. This appears in but a few Latin words. It is preserved in familias in the combinations pater familias, mater familias, etc., but elsewhere is archaic, e.g. viās (Enn. Ann. 421 Vahl.), fortūnās (Naevius).
- 114. The Genitive Singular in -ae goes back to an earlier $-\bar{a}i$ (dissyllabic), which is found in the poets as late as the Augustan Age. This termination $-\bar{a}i$ apparently arose by appending the Genitive termination $-\bar{i}$ of the o-stems directly to the stem, e.g. porta- \bar{i} . Whether $\bar{a}i$ became ai, ae by regular phonetic processes, or partly under the influence of the Dative and Locative ending ae, is uncertain.

- 115. Dative Singular. The Indo-European case-ending of the Dative Singular was -ai. But this had already in the Indo-European parent-speech contracted with the final $-\bar{a}$ of the stem producing *- $\bar{a}i$, whence successively $-\check{a}i$, -ae (ante-vocalic form; §§ 86; 80. 1). On an early Dative in $-\bar{a}$ see also § 86.
- 116. Accusative Singular. The case-ending was -m in Indo-European. This in combination with $-\bar{a}$ of the stem must have given a primitive Latin *- $\bar{a}m$, e.g. *port $\bar{a}m$; but the vowel in all final syllables in m had probably become shortened before the beginning of the historical period (§ 88. 2).
- 117. Vocative Singular. There was no case-ending in the Vocative Singular of \bar{a} -stems in the Indo-European parent-speech. The Vocative simply had the weak form \bar{a} of the suffix \bar{a} (§ 111). Thus *port \bar{a} would represent the Indo-European Vocative Singular of port \bar{a} . This *port \bar{a} would become in Latin *port \bar{a} according to § 71. 1. Hence the Vocative in actual use must be referred to another origin; it is probably simply the Nominative transferred to Vocative uses. The same is true of most Latin Vocatives in all declensions.
- 118. Ablative Singular. The Indo-European case-ending of the Ablative Singular seems to have been d with some preceding vowel, i.e. $-\bar{a}d$, $-\bar{e}d$, or $-\bar{o}d$. In the noun-declension, this case-ending belonged in Indo-European exclusively to the \bar{o} -stems (see § 130). In Latin it was transferred to \bar{a} -stems also, combining with the final $-\bar{a}$ of the stem to produce $-\bar{a}d$, which is preserved in early inscriptions, e.g. praidad, CIL. i. 63, 64; sentential, CIL. i. 196. 8, 17. These inscriptions belong to the period of Plautus, and such Ablatives are probably to be recognized in the text of his comedies. Before an initial consonant, final d when following a long vowel regularly disappeared. Theoretically, therefore, for a while two forms must have existed, an ante-

consonantal form, praidā, etc., and an ante-vocalic form, praidād, etc. But the ante-consonantal form early became predominant,—probably by 175 B.C.

- 119. Locative Singular. The case-ending of the Locative Singular in Indo-European was -i. In $-\bar{a}$ -stems this combined with $-\bar{a}$ of the stem to produce $-\bar{a}i$, a long diphthong (§ 86), which then became shortened to $-\check{a}i$, later -ae, just as in the case of the Dative (§ 115).
- 120. Nominative and Vocative Plural. The original caseending of the Nominative Plural in Indo-European was -ës for all nouns. In the case of \bar{a} -stems, this - $\bar{e}s$ must early have contracted with final $-\bar{a}$ of the stem to *- $\bar{a}s$. This *- $\bar{a}s$ is the regular termination of the Nominative Plural of \bar{a} -stems in the other Italic dialects, - Oscan, Umbrian, etc.; but has entirely disappeared in Latin. Instead of $-\bar{a}s$, we have the termination $-\check{a}i$, which Brugmann takes as an original Nominative and Accusative Dual (cf. Skr. $duv\bar{e} = \text{Indo-Eur.} *duv-\check{a}i$) that has taken on a Plural function. But an original final $-\ddot{a}i$ regularly becomes $-\bar{i}$, so that we should expect *porti (for *portăi), if the Nominative Plural were descended from this Dual form. Final -ai in Latin, as seen in the case of the Genitive, Locative, and Dative Singular (§§ 114, 115), can come only from an original $-\bar{a}i$, as the ante-vocalic form (§ 86). Hence Latin portae (early Latin *portai) must go back to an original *portai. The exact nature of this formation is not clear; but Greek χωραι, μοῦσαι, etc., are apparently of the same origin. The Vocative Plural of \bar{a} -stems is simply the Nominative employed in a Vocative function.
- 121. Genitive Plural. It is uncertain what form the case-ending of the Genitive Plural had in Indo-European. It was either $-\bar{o}m$ or $-\bar{o}m$, with the probabilities in favor of the latter

¹ A few possible vestiges occur in the early language.

(Brugmann, Grundriss, ii. p. 689). With the $-\bar{a}$ of the stem this case-ending must have early contracted to *- $\bar{a}m$, a termination which has entirely disappeared from all the Italic dialects. Instead of *- $\bar{a}m$ the Latin has $-\bar{a}rum$, a termination borrowed from the Genitive Plural of the Pronominal Declension. This $-\bar{a}rum$ is developed by Rhotacism (§ 98. 1) from an earlier $-\bar{a}som$, which appears in Homeric Greek in the form $-\bar{a}\omega v$, e.g. $\theta \epsilon \hat{a}\omega v$ for $\theta \epsilon \hat{a}(\sigma)\omega v$. The forms ending in -um, which sometimes occur in the poets, e.g. caelicolum, Dardanidum, are new formations, possibly in imitation of the o-stems, possibly after the analogy of such Genitives as Aeneadum (from Aeneadēs).

122. Dative and Ablative Plural. — The Indo-European parent-speech had no special form for the Ablative in the Plural. The Ablative Plural, in all languages in which that case occurs, is identical in form with the Dative. The genuine Dative and Ablative Plural of \bar{a} -stems in $-\bar{a}bus$ (on -bus, see § 144) appears only in a few words where distinction of sex is important, e.g. equ $\bar{a}bus$, fili $\bar{a}bus$, libert $\bar{a}bus$, etc. Elsewhere we have the termination $-\bar{i}s$, which is historically an instrumental formation borrowed from the o-stems. The termination of the Instrumental Plural of the o-stems was -ois (see § 133). By analogy the \bar{a} -stems created the termination -ais, which regularly became $-\bar{i}s$ (see § 80. 2).

Some advocate a Locative origin for these forms, but that is less probable.

123. The Accusative Plural. — The case-ending of the Accusative Plural in Indo-European was -ns. The n disappeared according to § 109. 3, i.e. portas for *portans.

0-Stems.

A. MASCULINES AND FEMININES.

124. In the Indo-European parent-speech there was Ablaut (§ 70) in the suffix of o-stems. Both forms of the strong grade

- occur, \check{e} and \check{o} . The former appears in the Vocative and Locative (Genitive) Singular, and partially in the Ablative; the latter in the remaining cases.
- 125. Nominative Singular. This is formed by appending -s to the stem, e.g. horto-s, later hortus (§ 76. 1). On ager, see §100. 3.
- 126. Genitive Singular. The so-called Genitive Singular of o-stems is in all probability a Locative that has taken on the function of the Genitive. The suffix took the form e (see § 124) which, with the Locative case-ending i, gave by contraction -ei, whence regularly $-\bar{i}$. The Locative function is still apparent in hum \bar{i} , belli, dom \bar{i} , her \bar{i} ; also in town names, e.g. Corinth \bar{i} .
- 127. Dative Singular. The Indo-European case-ending -ai early combined by contraction with final o of the stem, producing $-\bar{o}i$. Perhaps we have this in *Numasioi* in our earliest Latin inscription, CIL. xiv. 4123. In the historical period $-\bar{o}i$ has become \bar{o} (ante-consonantal form, § 86). Cf. $M\bar{a}t\bar{u}t\bar{a}$ for $M\bar{a}t\bar{u}t\bar{a}i$ (§ 86).
- 128. The Accusative Singular. The regular ending -m is appended to the stem in o, e.g. horto-m, classical hortum (§ 76. 1).
- 129. Vocative Singular. The stem with the e-suffix serves as a Vocative, e.g. hort-e; there is no case-ending.
- 130. Ablative Singular. O-stems were the only class of nouns in Indo-European that originally had a special Ablative case-ending; other nouns, so far as they exhibit a special ending for this case, have borrowed it from \check{o} -stems. The form of this case-ending is d with a preceding vowel, \check{a} , \check{e} , or \check{o} , i.e. $-\check{a}d$, $-\check{e}d$, or $\check{o}d$. As the case-ending appears only in contraction, the vowel cannot be determined. The stem appears in two forms, one in

- o- and one in e- (§ 124), e.g. $r\bar{e}cto$ and $r\bar{e}ct\bar{e}$ -. With the former of these the case-ending combined to produce * $r\bar{e}ct\bar{o}d$, and with the latter * $r\bar{e}ct\bar{e}d$. Forms with d appear in early Latin, e.g. poplicod, facilumed. Later (by 175 B.C.) the d disappeared; see § 118. The forms in $-\bar{e}$ became appropriated as Adverbs, $r\bar{e}ct\bar{e}$, facilume, etc.
- 131. Nominative and Vocative Plural. The Nominative Plural of o-stems in Indo-European was originally formed by appending the case-ending $-\check{e}s$ to the stem, giving Indo-European $-\bar{o}s$. This termination appears in the other Italic dialects, Oscan, Umbrian, etc.; but in Latin the o-stems have borrowed the termination of the Pronominal Declension, viz. -oi. A tradition of this appears in pilumnoe, poploe cited by Festus (p. 205, ed. Müller). But final oi regularly became \bar{i} , the classical termination, e.g. hort \bar{i} . In Plautus and in early inscriptions, we find also a termination $-\bar{e}s$, e.g. $magistr\bar{e}s$. This represents a borrowing from the i-stems (see § 154), helped doubtless by the existence of $qu\bar{e}s$ as a 'by-form' of $qu\bar{i}$ (the relative).
- 132. Genitive Plural. The original termination was $-\bar{o}m$, the result of contraction of final o of the stem and the case-ending $-\bar{o}m$ or $-\bar{o}m$ (§ 121). This termination, shortened to $-\bar{o}m$ (§ 42. 1), appears in early Latin, e.g. $R\bar{o}m\bar{a}nom$, and in the form -um (§ 76. 1) is also regular in certain words in the classical period, e.g. talentum, modium, deum, etc. (Gr. § 25. 6. a). The usual ending $-\bar{o}rum$ is of secondary origin, and is formed after the analogy of the Genitive Plural of \bar{a} -stems (§ 121).
- 133. Dative and Ablative Plural. The so-called Dative and Ablative Plural is in reality an Instrumental. The Indo-European form of the termination was $-\bar{\sigma}is$. This in Latin became first $-\check{\sigma}is$ (§ 86), and then $-\bar{\iota}s$ (§ 81. 2), the classical termination. Cf. § 122.

134. Accusative Plural. — The Indo-European case-ending was -ns. Latin *horto-ns would represent the primitive formation; this became hortos; § 109. 3. b.

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- 135. In the Singular these present no special peculiarity. The Nominative, Accusative, and Vocative have -m as case-ending, which is Indo-European.
- 136. The Nominative, Accusative, and Vocative Plural have -ā. This ending is in all probability identical with that of the Nominative Singular of -ā-stems, i.e. certain Feminine collective nouns came to be felt as Plurals and were so used syntactically. Thus an original *jugā (Latin jugā) meaning 'collection of yokes' (cf. German das Gejöche) came to be felt as a Plural and was construed accordingly. The use of the Singular in Greek with a Neuter Plural subject, apparently dates from the time when the Neuter Plural was still a Feminine Singular.

Consonant Stems.

A. MASCULINES AND FEMININES.

The original case-endings are seen to best advantage in the Mute stems.

- 137. Nominative Singular. The case-ending is s, which combines with the final consonant in the ways enumerated in Gr. §§ 32, 33, e.g. prīncep-s; mīles, dux.
- 138. Genitive Singular. Of the three forms of the Indo-European case-ending, viz. -s, -es, -os, the second, -es, is the one which regularly appears appended to consonant stems. This becomes -is according to § 73. 2. a), e.g. ped-is, mīlitis. Traces of the ending -os are seen in early Latin nōmin-us (-us for -os acc. to § 76. 1), Castor-us, honōr-us, etc., perhaps also in opus in the phrase opus est, 'it is necessary.' Cf. § 341. 2.

- 139. Dative Singular. The Indo-European case-ending was probably -ai, which regularly became -ī, e.g. ped-ī for *ped-ai; mīlitī for *mīlitai.
- 140. Accusative Singular. The Indo-European case-ending was -m, which, after a consonant, necessarily became sonant (§ 102. 1) and developed as -em, e.g. pedem for *pedm; principem for *principm.
- 141. Ablative Singular. The termination -ĕ may represent either the Indo-European Instrumental case-ending -ā or the Locative -ĕ. Each of these would regularly become -ĕ in Latin (§§ 71. 1; 75). Probably we should recognize the presence of both formations in the Latin Ablative, just as we recognize the presence of both Instrumental and Locative meanings in that case.
- 142. Nominative and Vocative Plural. The Indo-European case-ending of the Nominative Plural was -ĕs, seen in Greek -ϵs (e.g. ψύλακ-ϵs), but is not preserved in Latin. Plautine canĕs, pedĕs, turbinĕs, etc., come under § 88. 3. The ending -ēs which appears regularly in all nouns of so-called Third Declension has been borrowed from the ĕ-stems; see § 154.
- 143. Genitive Plural. The regular ending -um is for earlier -om. Whether this was $-\bar{o}m$ or $-\bar{o}m$ in Indo-European is uncertain; see § 121.
- 144. Dative and Ablative Plural. The Indo-European ending was -bhos, which became -bos (\S 97. 1. b). This appears once or twice in early Latin, but soon became -bus (\S 76. 1). The i of -ibus, the regular termination of all consonant stems, is borrowed from the i-stems; \S 156.
- 145. Accusative Plural. The Indo-European ending -ns became -ns (§ 102. 1) after a consonant. This regularly became *-ens, whence -ēs; § 109. 3. b.

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146. The Nominative and Accusative Singular are formed without case-ending. For the $-\ddot{a}$ of the Nominative and Accusative Plural, see § 136.

STEM-FORMATION OF CONSONANT STEMS.

- 147. Several formative suffixes originally showed Ablaut (§§ 62, 70). Thus:
- 1. **S-Stems.**—Stems formed with the suffix -os (-us), e.g. gen-us, had in certain cases the suffix -es-; thus originally Nom. *gen-os, Gen. *gen-es-es, Dat. *gen-es-ai, later gen-us, gen-er-is, gen-er-ī (§ 98. 1). In some words the -os- suffix of the Nominative invaded the oblique cases, e.g. temp-us, Gen. temp-or-is (for *temp-os-es). Yet the -es- suffix appears in the adverbs temp-er-ī, temp-er-e. Cf. also temp-es-tās, temp-es-tīvus, where the original -es- has been protected by the following t. Pīgnus, which is ordinarily declined pīgnus, pīgnoris, had the -es- suffix in early Latin, e.g. pīgnerī (Plautus).
- 2. Nasal Stems. The suffixes of many nasal stems originally had Ablaut (§§ 62, 70). Thus:
- a) The suffix $-\bar{o}n$ (lengthened from -on-, strong grade; § 62) had another strong form, -en-, and a weak one, -n-. Most words have lost the -n- grade, and show only -on- or -en-, e.g. $umb-\bar{o}$ for $umb-\bar{o}(n)$ (§ 109. 1), Gen. $umb-\bar{o}n$ -is, etc., $\bar{o}rd-\bar{o}(n)$, $\bar{o}rd$ -in-is (for * $\bar{o}rd$ -en-is, § 73. 2), $turb-\bar{o}(n)$, turb-in-is. $Car-\bar{o}(n)$, Gen. car-n-is, shows a trace of the weak grade of the suffix.
- b) The suffix $-i\bar{o}(n)$ had another form of the strong grade, viz. -ien-, and a weak grade -in-. The weak grade appears in the other Italic languages, Oscan, Umbrian, etc., but not in Latin, where we have only $-i\bar{o}n$, e.g. $\bar{a}cti\bar{o}(n)$, $\bar{a}cti-\bar{o}n$ -is.
- c) The suffix $-m\bar{o}(n)$ had also the grades -men- and -mn-. Sometimes the -men- grade appears in the oblique cases, e.g.

- $ho-m\bar{o}(n)$, ho-min-is, etc.; sometimes the $-m\bar{o}(n)$ of the Nominative appears throughout, e.g. $serm\bar{o}$, $serm\bar{o}nis$.
- d) Neuters in -men show two forms of the suffix. In the Nominative -men stands for -mn (§ 102. 1), e.g. $n\bar{o}$ -men for $*n\bar{o}$ -mn. In the oblique cases min- is for men-, e.g. $n\bar{o}$ -min-is for $*n\bar{o}$ -men-es (§ 73. 2).
- 3. R-Stems. Some of these originally had Ablaut in the suffix. Thus:
- a) Nouns of relationship in -ter, e.g. pater, māter, frāter. These originally had three forms of the suffix, viz. -ter-, ter, and -tr- (weak form; § 62). The Greek has clung quite closely to the original declension, πα-τήρ, πα-τρ-ός, πα-τέρ-α. In Latin the -tr- form of the suffix has gained the supremacy in the oblique cases; in the Nominative, -ter represents earlier *-ter (§ 88. 2).
- b) Nouns of agency in -tor originally had three forms of the suffix, viz. -tor-, -tor-, -tr-. In Latin these have all practically been reduced to one, -tor (Nominative -tor being for earlier *-tor; § 88. 2). The weak grade -tr-, however, appears in the corresponding feminine nouns of agency, e.g. vic-tr-\(\bar{v}x\), gene-tr-\(\bar{v}x\), etc.

Ĭ-Stems.

A. MASCULINE AND FEMININE i-STEMS.

148. These originally had Ablaut (§§ 62; 70) in the suffix. The strong form of the suffix was -ei-, the weak form -i-.

Many original i-stems have passed over in Latin into the -iō(n) class (§ 147. 2. b). Examples are statiō (earlier *statis; cf. Gr. στάσις for *στα-τις); -ventiō (earlier *-ventis; cf. Gr. βάσις for *βατις); -tentiō (earlier -tentis; cf. Gr. τάσις for *τατις).

149. Nominative Singular. — This is regularly formed by appending -s, e.g. $\bar{\imath}gni$ -s, turri-s. Several nouns have lost the i before s by Syncope (§ 92), e.g. pars for *part-(i)s (cf. partim); $g\bar{e}ns$ for *gent-(i)s: $m\bar{e}ns$ for *ment-(i)s. Gr. § 38. 3.

- 150. Genitive Singular. The Indo-European termination seems to have been -eis, i.e. ei (strong form of suffix) + -s, weak grade of Genitive case-ending (§ 138). But this termination -eis, while preserved in Oscan and Umbrian, has disappeared in Latin. The termination -is is borrowed from Consonant stems.
- 151. Dative Singular. The Indo-European case-ending -ai regularly became $-\bar{i}$ as in consonant stems, and this $-\bar{i}$ contracted with the \bar{i} of the stem, e.g. turr \bar{i} for *turri- \bar{i} .
- 152. Accusative Singular.—The regular ending -m is appended to the stem, e.g. turri-m. The termination -em (borrowed from the Consonant stems) has, however, largely displaced primitive -im. See Gr. § 37.
- 153. Ablative Singular. There was no special form for the Ablative Singular of *i*-stems in Indo-European. The Latin, however, formed an Ablative in -d, e.g. turrīd, after the analogy of o-stems (hortos: hortom: hortod:: turris: turrim: turrīd). These -d-forms, however, are attested by only scanty examples; the d early disappeared (§ 109. 1), leaving the termination -*i*.
- 154. Nominative Plural. The suffix of the Nominative Plural took the form -ei- (§ 148). Thus the primitive formation would be represented by *turr-ei- $\check{e}s$. The i between vowels first became j, and then regularly disappeared. The resulting *turr $\check{e}s$ then became turr $\check{e}s$ by contraction. Cf. in Greek $\pi\acute{o}\lambda\epsilon\iota$ s ($\epsilon\iota=\bar{e}$) for * π o $\lambda\epsilon\varsigma$ - ϵ s.
- 155. Genitive Plural. The ending -um is appended to the stem ending in the i-suffix, e.g. turri-um.
- 156. Dative and Ablative Plural. The Indo-European ending -bhos is appended to the stem, ending in the i-suffix, e.g. turri-bus. On -bus for *-bhos, see §§ 97. 1. 6; 76. 1.

157. Accusative Plural. — The termination was -ns; hence originally turrins, whence turris (\S 109. 3. b). The termination $-\bar{e}s$, which is often used instead of $-\bar{i}s$, is borrowed from the Consonant stems.

B. NEUTER i-Stems.

- 158. 1. These changed the final -i to -i by a regular law (§ 75). Stems of more than two syllables then dropped the -i thus developed, while dissyllabic stems retained it, e.g. calcar(e), animal(e); but mare, $r\bar{e}te$.
- 2. The case-endings of Neuter i-stems are in general the same as for Masculines and Feminines. On the -ā (i.e. i-a) of the Nominative and Accusative Plural, see § 136.

Consonant Stems that have partially adapted themselves to the Inflection of i-Stems.

- 159. As stated in the *Grammar*, § 40, the adaptation is practically confined to the Plural, viz. the Genitive and Accusative, where -ium and $-\bar{i}s$ take the place of the normal -um and $-\bar{e}s$. Several distinct groups of words belong here:
- 1. One of the most important classes consists of nouns in $-\bar{e}s$, e.g. $aed\bar{e}s$, $n\bar{u}b\bar{e}s$, etc. These seem to have been originally Neuters with the suffix -os-, -es- (§ 147. 1). Thus $aed\bar{e}s$ is the Greek $a\bar{t}\theta os$; $s\bar{e}d\bar{e}s$ is the Gr. $\tilde{\epsilon}\delta os$, etc. What has led to the adaptation of these words to the inflection of i-stems in the Genitive and Accusative Plural is not certain; but the fact that no stems of this class ever show -im in the Accusative Singular or -i in the Ablative Singular, whereas regular i-stems in -is frequently show these endings, makes it impossible to regard nouns in $-\bar{e}s$, Gen. -is, as actual i-stems.
- 2. Nouns in $-t\bar{a}s$, Gen. $-t\bar{a}t$ is, may possibly represent \bar{i} -stems, $i.e.\ c\bar{i}v$ it $\bar{a}t$ -i-; yet the absence of -im and $-\bar{i}$ forms in the Accusative and Ablative Singular is against this. Cf. 1 above.

¹ Neue (Formenlehre i.² 235) gives one or two extremely doubtful examples of -ī from Mss.

Ŭ-Stems.

A. MASCULINE AND FEMININE u-STEMS.

- 160. Like the \tilde{z} -stems, the \tilde{u} -stems had a suffix which appeared in two forms, viz. -eu- and -u-. The former was strong; the latter weak. See §§ 64. c; 70.
- 161. Nominative Singular. The Nominative Singular appends -s, e.g. frūctu-s.
- 162. Genitive Singular. The Genitive Singular had the strong form of the suffix, viz. -eu-. To this was added the Genitive case-ending in its weakest form, viz. -s (§ 138), thus *frūct-eu-s, whence regularly frūctūs (§ 85). Early Latin also shows two other formations, viz. in -uis and -uos, e.g. senātu-is and senātu-os. These represent the other forms of the Genitive case-ending.

The termination $-\bar{u}s$ cannot be explained as the result of contraction from either -uis or -uos. Neither ui nor uo contracts to \bar{u} . In Plautus and Terence u-stems largely follow the analogy of o-stems and form the Genitive Singular in $-\bar{i}$, e.g. $sen\bar{a}t\bar{i}$.

- 163. Dative Singular. The Indo-European case-ending -ai appended to the stem regularly gives $-\bar{\imath}$, e.g. $fr\bar{u}ctu-\bar{\imath}$. The Dative in $-\bar{u}$ is not formed from that in $-u\bar{\imath}$ by contraction; for $-u\bar{\imath}$ does not contract to \bar{u} . The forms in \bar{u} are either Instrumentals or Locatives. Thus $fr\bar{u}ct\bar{u}$ may be for * $fr\bar{u}ctu-e$ by contraction. On \check{e} as the representative of an original $-\check{a}$ (Instrumental case-ending), see § 141. If Locative, $fr\bar{u}ct\bar{u}$ is for * $fr\bar{u}cteu$, a peculiar suffixless formation.
- 164. Accusative Singular.—The regular ending -m is appended, e.g. fructu-m.
- 165. Ablative Singular. The earliest Latin formation had -d, e.g. frūctūd. This, however, was not inherited from the Indo-

- $ho-m\bar{o}(n)$, ho-min-is, etc.; sometimes the $-m\bar{o}(n)$ of the Nominative appears throughout, e.g. $serm\bar{o}$, $serm\bar{o}nis$.
- d) Neuters in -men show two forms of the suffix. In the Nominative -men stands for -mn (§ 102. 1), e.g. $n\bar{o}$ -men for * $n\bar{o}$ -mn. In the oblique cases min- is for men-, e.g. $n\bar{o}$ -min-is for * $n\bar{o}$ -men-es (§ 73. 2).
- 3. **R-Stems.**—Some of these originally had Ablaut in the suffix. Thus:
- a) Nouns of relationship in -ter, e.g. pater, mater, frater. These originally had three forms of the suffix, viz. -ter-, ter, and -tr- (weak form; § 62). The Greek has clung quite closely to the original declension, $\pi a \tau \acute{\eta} \rho$, $\pi a \tau \rho \acute{o}s$, $\pi a \tau \acute{e}\rho a$. In Latin the -tr- form of the suffix has gained the supremacy in the oblique cases; in the Nominative, -ter represents earlier *-ter (§ 88. 2).
- b) Nouns of agency in -tor originally had three forms of the suffix, viz. -tor-, -tor-, -tr-. In Latin these have all practically been reduced to one, -tor (Nominative -tor being for earlier *-tor; § 88. 2). The weak grade -tr-, however, appears in the corresponding feminine nouns of agency, e.g. vic-tr-īx, gene-tr-īx, etc.

Ĭ-Stems.

A. MASCULINE AND FEMININE i-STEMS.

148. These originally had Ablaut (§§ 62; 70) in the suffix. The strong form of the suffix was -ei-, the weak form -i-.

Many original i-stems have passed over in Latin into the -iō(n) class (§ 147. 2. b). Examples are statiō (earlier *statis; cf. Gr. στάσις for *στα-τις); -ventiō (earlier *-ventis; cf. Gr. βάσις for *βατις); -tentiō (earlier -tentis; cf. Gr. τάσις for *τατις).

149. Nominative Singular. — This is regularly formed by appending -s, e.g. $\bar{\imath}gni$ -s, turri-s. Several nouns have lost the i before s by Syncope (§ 92), e.g. pars for *part-(i)s (cf. partim); $g\bar{e}ns$ for *gent-(i)s: $m\bar{e}ns$ for *ment-(i)s. Gr. § 38. 3.

- 150. Genitive Singular. The Indo-European termination seems to have been -eis, i.e. ei (strong form of suffix) + -s, weak grade of Genitive case-ending (§ 138). But this termination -eis, while preserved in Oscan and Umbrian, has disappeared in Latin. The termination -is is borrowed from Consonant stems.
- 151. Dative Singular. The Indo-European case-ending -ai regularly became $-\bar{i}$ as in consonant stems, and this $-\bar{i}$ contracted with the \bar{i} of the stem, e.g. turr \bar{i} for *turri- \bar{i} .
- 152. Accusative Singular.—The regular ending -m is appended to the stem, e.g. turri-m. The termination -em (borrowed from the Consonant stems) has, however, largely displaced primitive -im. See Gr. § 37.
- 153. Ablative Singular. There was no special form for the Ablative Singular of *i*-stems in Indo-European. The Latin, however, formed an Ablative in -d, e.g. turrīd, after the analogy of o-stems (hortos: hortom: hortod:: turris: turrim: turrīd). These -d-forms, however, are attested by only scanty examples; the d early disappeared (§ 109. 1), leaving the termination -\(\bar{i}\).
- 154. Nominative Plural. The suffix of the Nominative Plural took the form -ei- (§ 148). Thus the primitive formation would be represented by *turr-ei- $\check{e}s$. The i between vowels first became j, and then regularly disappeared. The resulting *turr $\check{e}s$ then became turr $\check{e}s$ by contraction. Cf in Greek $\pi\acute{o}\lambda\epsilon\iota_s$ ($\epsilon\iota=\bar{e}$) for * π o $\lambda\epsilon\iota_s$ - ϵs .
- 155. Genitive Plural. The ending -um is appended to the stem ending in the i-suffix, e.g. turri-um.
- 156. Dative and Ablative Plural. The Indo-European ending -bhos is appended to the stem, ending in the i-suffix, e.g. turri-bus. On -bus for *-bhos, see §§ 97. 1. b; 76. 1.

157. Accusative Plural. — The termination was -ns; hence originally turrins, whence turris (\S 109. 3. δ). The termination $-\bar{e}s$, which is often used instead of $-\bar{i}s$, is borrowed from the Consonant stems.

B. NEUTER i-STEMS.

- 158. 1. These changed the final -i to -i by a regular law (§ 75). Stems of more than two syllables then dropped the -i thus developed, while dissyllabic stems retained it, e.g. calcar(e), animal(e); but mare, $r\bar{e}te$.
- 2. The case-endings of Neuter i-stems are in general the same as for Masculines and Feminines. On the $-\tilde{a}$ (i.e. i-a) of the Nominative and Accusative Plural, see § 136.

Consonant Stems that have partially adapted themselves to the Inflection of i-Stems.

- 159. As stated in the *Grammar*, § 40, the adaptation is practically confined to the Plural, viz. the Genitive and Accusative, where -ium and $-\bar{i}s$ take the place of the normal -um and $-\bar{e}s$. Several distinct groups of words belong here:
- 1. One of the most important classes consists of nouns in $-\bar{e}s$, e.g. $aed\bar{e}s$, $n\bar{u}b\bar{e}s$, etc. These seem to have been originally Neuters with the suffix -os-, -es- (§ 147. 1). Thus $aed\bar{e}s$ is the Greek $ai\theta os$; $s\bar{e}d\bar{e}s$ is the Gr. $\check{e}\delta os$, etc. What has led to the adaptation of these words to the inflection of \check{i} -stems in the Genitive and Accusative Plural is not certain; but the fact that no stems of this class ever show -im in the Accusative Singular or $-\bar{i}$ in the Ablative Singular, whereas regular \check{i} -stems in -is frequently show these endings, makes it impossible to regard nouns in $-\bar{e}s$, Gen. -is, as actual \check{i} -stems.
- 2. Nouns in $-t\bar{a}s$, Gen. $-t\bar{a}tis$, may possibly represent \bar{i} -stems, *i.e.* $c\bar{i}vit\bar{a}t$ -i-; yet the absence of -im and $-\bar{i}$ forms in the Accusative and Ablative Singular is against this. *Cf.* 1 above.

¹ Neue (Formenlehre i.² 235) gives one or two extremely doubtful examples of -ī from Mss.



Ŭ-Stems.

A. MASCULINE AND FEMININE u-STEMS.

- 160. Like the $\tilde{\imath}$ -stems, the $\tilde{\imath}$ -stems had a suffix which appeared in two forms, viz. -eu- and -u-. The former was strong; the latter weak. See §§ 64. c; 70.
- 161. Nominative Singular. The Nominative Singular appends -s, e.g. frūctu-s.
- 162. Genitive Singular. The Genitive Singular had the strong form of the suffix, viz. -eu-. To this was added the Genitive case-ending in its weakest form, viz. -s (§ 138), thus *frūct-eu-s, whence regularly frūctūs (§ 85). Early Latin also shows two other formations, viz. in -uis and -uos, e.g. senātu-is and senātu-os. These represent the other forms of the Genitive case-ending.

The termination $-\bar{u}s$ cannot be explained as the result of contraction from either -uis or -uos. Neither ui nor uo contracts to \bar{u} . In Plautus and Terence u-stems largely follow the analogy of o-stems and form the Genitive Singular in $-\bar{i}$, e.g. $sen\bar{a}f\bar{i}$.

- 163. Dative Singular. The Indo-European case-ending -ai appended to the stem regularly gives $-\bar{\imath}$, e.g. $fr\bar{\imath}\iota ctu-\bar{\imath}$. The Dative in $-\bar{\imath}\iota$ is not formed from that in $-\bar{\imath}\iota$ by contraction; for $-\bar{\imath}\iota$ does not contract to $\bar{\imath}\iota$. The forms in $\bar{\imath}\iota$ are either Instrumentals or Locatives. Thus $fr\bar{\imath}\iota ct\bar{\imath}\iota$ may be for * $fr\bar{\imath}\iota ct\iota \iota$ -e by contraction. On $\bar{\epsilon}$ as the representative of an original $-\bar{\imath}\iota$ (Instrumental case-ending), see § 141. If Locative, $fr\bar{\imath}\iota ct\bar{\imath}\iota$ is for * $fr\bar{\imath}\iota ct\iota \iota$, a peculiar suffixless formation.
- 164. Accusative Singular.—The regular ending -m is appended, e.g. fructu-m.
- 165. Ablative Singular. The earliest Latin formation had -d, e.g. frūctūd. This, however, was not inherited from the Indo-

European, but was a new formation, specifically Latin. See § 153. The -d was soon dropped, giving frūctū.

- 166. Nominative Plural. The original formation would have been in *-eu-ës, i.e. the strong form of the suffix (§ 160) + the Nominative case-ending -ës; *-eu-ës would regularly have become *-u-is, which would have remained uncontracted. The regular Nominative Plural in $-\bar{u}s$ must, therefore, be referred to another origin; it is probably an Accusative that has taken on a Nominative function. Cf. early Latin Nominatives in $-\bar{i}s$ from \bar{i} -stems, which are likewise Accusatives in Nominative function.
- 167. Genitive Plural. $Fr\bar{u}ctu-um$, etc., are for earlier $fr\bar{u}ctu-om$. On -om, see § 121.
- 168. Dative and Ablative Plural. The regular Indo-European case-ending *-bhos became Latin -bus ($\S 97.1.b$), and was regularly appended to the stem in u-, e.g. frūctu-bus. Later, either owing to the influence of Consonant and $\check{\imath}$ -stems, or to the tendency of $\check{\imath}$ to become $\check{\imath}$ before labials ($\S 6.2$), -ubus often became -ibus. Tribubus never becomes *tribibus, for what reason, is not clear.
- 169. Accusative Plural. The primitive formation would be represented by *frūctū-ns (case-ending -ns), whence regularly frūctūs; § 109. 3. b.

B. NEUTER ŭ-STEMS.

170. These are not numerous and present few peculiarities. The long u of $gen\bar{u}$ and $corn\bar{u}$ has been explained as an original dual formation,—'two knees,' etc.

\bar{I} and \bar{U} -Stems.

171. I. The only $\bar{\imath}$ -stem in Latin is $v\bar{\imath}s$. The terminations of the Singular follow those of $\bar{\imath}$ -stems; $\bar{\imath}$ has probably been shortened in the Genitive, though the actual quantity cannot be

- proved. The Accusative $v\bar{i}m$ for $*v\bar{i}m$ is regular; § 88. 2. In the Plural $v\bar{i}r\bar{e}s$, $v\bar{i}rium$, etc., result from the conception of the stem as $v\bar{i}s$ -, whence $*v\bar{i}s$ - $\bar{e}s$, $v\bar{i}r\bar{e}s$, etc.; § 98. 1. Cf. the early Latin Plural, $sp\bar{e}r\bar{e}s$ from $sp\bar{e}$ -s, an \bar{e} -stem.
- 2. \overline{U} -stems are represented by $s\overline{u}s$ and $gr\overline{u}s$, both of which take the endings of consonant-stems, shortening \overline{u} regularly to \overline{u} before vowels. Subus is not a contraction of suibus, but represents another formation.

\overline{E} -Stems.

- 172. \overline{E} -stems are represented by spēs, quies, and nouns in -ies, e.g. rabies, acies, facies, species, etc. The suffix -ie- originally had Ablaut (§ 70) in Indo-European, appearing in the forms -i- and -ie-; but Latin has lost all traces of the i-suffix and has -ie throughout. On res and dies, which were originally diphthong-stems, see § 180.
- 172^a. Nominative Singular. The case-ending is -s as elsewhere.
- 173. Genitive Singular. The $-\bar{\imath}$ of $-\bar{\epsilon}\bar{\imath}$ is probably borrowed from \check{o} -stems, precisely as in case of the ending $-\bar{a}\bar{\imath}$ of \bar{a} -stems; subsequently $\bar{\epsilon}$ was shortened before $-\bar{\imath}$, when a consonant preceded the termination, e.g. fide $\bar{\imath}$, spe $\bar{\imath}$, re $\bar{\imath}$, pleb $\check{\epsilon}\bar{\imath}$. The ending $-\bar{\epsilon}$, e.g. aci $\bar{\epsilon}$, di $\bar{\epsilon}$ (in such expressions as quinti di $\bar{\epsilon}$, postridi $\bar{\epsilon}$, pridi $\bar{\epsilon}$, etc.) is not Genitive, but Locative. The original formation was *di $\bar{\epsilon}$ (Locative ending $-\bar{\imath}$). But under certain conditions this diphthong $-\bar{\epsilon}$ became $-\bar{\epsilon}$ (cf. § 86); hence $d\bar{\imath}\bar{\epsilon}$ for *di $\bar{\epsilon}$ i.
- 174. Dative Singular. The genuine Dative formation is seen in aciēi for *aciē-ai (§ 80. 2). The Locative in -ē serves not only as Genitive (§ 173), but sometimes also as Dative, e.g. fidē, rē.
- 174^a. Accusative Singular. This is formed regularly by appending the case-ending -m, before which \bar{e} is regularly shortened (§ 88. 2), e.g. aciem for earlier *aciem.

- 175. Ablative Singular. No traces of forms with -d are found, though it is likely that $aci\bar{\epsilon}$, etc., are for an earlier * $aci\bar{\epsilon}d$, etc. This formation would be secondary, after the analogy of the Ablative Singular of δ -stems.
- 176. Nominative Plural. The Nominative case-ending -es (see § 142) combines by contraction with the stem, e.g. actes for *acte-es.
- 177. Genitive Plural. The termination $-\bar{e}rum$ is after the analogy of $-\bar{a}rum$ of the \bar{a} -stems and $-\bar{o}rum$ of the \bar{o} -stems.
- 178. Dative and Ablative Plural. The ending -bus, for Indo-European -bhos (§ 97. 1. b), is appended directly to the stem.
- 179. Accusative Plural. The primitive Latin formation would be represented by *acciens, whence accies (§ 109. 3. b).

Stems ending in a Diphthong.

- 180. 1. Rēs, originally a diphthongal stem, viz. *rēis, had become rēs in the Indo-European period.
- 2. The Nominative Singular of $n\bar{a}vis$ was originally * $n\bar{a}us$. This form disappeared; $n\bar{a}vis$ is a new formation after the Genitive $n\bar{a}vis$, Dative $n\bar{a}v\bar{i}$.
- 3. $B\bar{o}s$ is probably not a genuine Latin word, but is borrowed from one of the Italic dialects (Oscan?); \bar{o} represents earlier $\bar{o}u$.
- 4. The stem of $J\bar{u}(piter)$ was, in Indo-European, *Djev-Initial dj regularly became j (§ 104. 1. a); hence *Djev- became *Jev-, and further Jov- (§ 73. 3). From this stem are formed the oblique cases Jov-is, Jov- \bar{i} , Jov-em. The Vocative consisted of the simple stem, namely *Jev, which became *Jeu, $J\bar{u}$ (§ 85). It is this last which combined with -piter (i.e. pater, § 73. 2) gives $J\bar{u}piter$, really a Vocative, but used as a Nominative as well.

The original Nominative was *Djeus, with a 'by-form' *Dijeus. From the latter came Dies (§ 86) seen in the archaic Diespiter, which is the real Nominative corresponding to Jupiter. The same

dies as a common noun, 'day,' passed over into the inflection of the e-stems.

FORMATION OF THE COMPARATIVE AND SUPERLATIVE.1

181. The Comparative. — The regular Comparative Suffix in Latin was -ios-, with -ies- as another form of the strong grade, and -is- as weak grade (\S 62). But -ios- alone survived in Latin. In the Nominative Masculine and Feminine the original formation was -ios. In the oblique cases s became r (\S 98. 1), e.g. meliōris for *meliōsis, and the r was subsequently transferred by analogy to the Nominative. The Neuter kept s, changing o to u (\S 76. 1), e.g. melius. Minus is not for *min-ios (which would be impossible in Latin), but was probably originally a Noun, minus, Gen. *mineris. This became an Adjective and developed a Masculine minor, after the analogy of other Comparatives.

The Indo-European parent-speech had another suffix, which in some languages developed Comparative force, viz. -tero-, -terā-, e.g. Greek κακώ-τερος. But in Latin this suffix retained its primitive force of 'having a relation to,' 'connected with,' e.g. ex-terus, lit. 'having a relation to the outside, outer'; *interus, posterus, citer, etc. These were felt as Positives and took the regular suffix -ior- to denote Comparative relation.

182. The Superlative. — We have three Superlative suffixes in Latin:

- 1. -mo- seen in sum-mus for *sup-mus (§ 106. 2); prī-mus; brūma 'winter,' lit. 'shortest day,' for *brev-ma (brev-is); pessimus; also in extrē-mus, postrē-mus, suprē-mus; plūri-mus, proximus (for *proqu(i)s-imus).
- 2. -tumus, -timus (§ 6. 2), seen in ci-timus, ex-timus, in-timus, pos-tumus, ul-timus, op-timus, for op(i) timus, from ops (§ 92);

¹ See Lindsay, Latin Language, p. 404; Stolz, Lateinische Grammatik, § 92.

- earlier citumus, etc. This suffix originally had much the same meaning as tero-, terā- (see § 181), and still retains its primitive force in several words, e.g. lēgi-timus; fīni-timus, etc.
- 3. The suffix -issimus is of uncertain origin. It can hardly be for -istimus, a mingling of -isto- (seen in the Greek Superlative ending -1070s) and -mus; for -istimus could not become -issimus. It is more likely that -issimus is for *isti-timus. By syncope this would become *-istimus, whence -issimus (§ 108.1). Acerrimus is probably for an original *acr-is-imos, whence by Syncope (§ 92) *acrsimos, *acersimos (§ 100.3), acerrimus (§ 106.4). Similarly facillimus is for *facil-is-imos, *facillimos, facillimus (§ 106.3); -is-, in the forms assumed as original, represents the weak form of the Comparative suffix (§ 181). Cf. Brugmann, Grundriss, ii. p. 158.
 - 4. On the quantity of i in -issimus, see § 43.

Numerals.1

Cardinals.

- 183. 1. Ūnus is for earlier oinos; § 81. 1. (cf. Greek οἴνη, 'the one-spot' on dice). German ein and English one are the same word; Greek εἶs is not related to ūnus, but to semel, singuli.
- 2. **Duo** is for earlier $*du\bar{o}$ according to § 88. 3; cf. Greek $\delta \omega$. The formation was Dual.
- 3. Trēs. The stem shows Ablaut (§ 64. c), strong grade trei-, weak grade tri-. The former stem originally appeared in the Nominative, *trei-ës, whence *tre-ës, trēs. The other cases have tri-, viz. tri-um, tri-bus, tri-a, trīs (for *trī-ns; § 109. 3).
- 4. Quattuor. The Indo-European form from which quattuor is descended was probably *quetvores; but the Latin form early lost its inflection, after the analogy of the other indeclinable numerals; $-\bar{o}r$ regularly became $\bar{o}r$; § 88. 3. The change of the

¹ See Brugmann, Grundriss, ii. §§ 164-181; Lindsay, Latin Language, p. 408 ff.; Stolz, Lateinische Grammatik, § 91.

primitive e to a, and the doubling of the t cannot be referred to any recognized law. The change of v to u is perfectly natural; ef. § 16. 1. f.

- 5. Quinque. The Indo-European form was *penque; cf. Skrt. panca, Greek $\pi \acute{e} \nu \tau e$. Initial qu- in Latin is the result of assimilation of the first syllable to the second; cf. $bi-b\bar{o}$ for Indo-European *pi- $b\bar{o}$ (Skrt. $pib\bar{a}mi$). The change of e to i is in accordance with § 73. 2. b. The lengthening of i awaits satisfactory explanation.
- 6. Sex. The Indo-European form was apparently *sveks; on s- for sv, see § 104. 2. b). Cf. Greek $\xi\xi$, Doric $\xi\xi$ (for $\sigma\xi\xi$).
- 7. Septem. The Indo-European form was *septn, which would have regularly developed in Latin as *septen (§ 102. 1; cf. Eng. sev-en; German sieb-en); the final -em is the result of association with dec-em and novem.
- 8. Octō is descended from an Indo-European *octō. The form was a Dual ('two fours'?).
- 9. Novem. The Indo-European form was *nevn, which in Latin would regularly have appeared as *noven (§ 102. 1; cf. Eng. ni-ne; German neu-n); -em for -en is due to the following dec-em.
 - 10. Decem is for Indo-European *decm; § 102. 1.
- 11. 'Eleven' to 'Nineteen.' These are regularly formed by composition, undecim, tredecim, etc. On -im for -em, see § 73. 2. For tredecim we should expect *tredecim according to § 89. The e remains unexplained. 'Eighteen' and 'Nineteen' were usually expressed by duodeviginti, undeviginti.
- 12. **Viginti.** The Indo-European form was $*v\bar{\imath}-kmt\bar{\imath}$, in which $v\bar{\imath}$, 'two,' is for $*dv\bar{\imath}$, an original Neuter Dual, from the root *du-; $-kmt\bar{\imath}$, whence in Latin $*-gent\bar{\imath}$, $-gint\bar{\imath}$ (§ 102. 1) was also Dual, in the sense of 'tens.' The change of k to g is peculiar, though not unexampled; cf. dig-itus for *dic-itus (from root dic-' point').
- 13. 'Thirty' to 'Ninety.' These all end in -gintā, which in Indo-European was *-kontā (cf. Gr. τριάκοντα, τεσσαράκοντα, etc.), a Neuter Plural meaning 'tens'; *-kontā shows the strong grade of the root whose weak grade *knt- lies at the basis of vīgintī (see

- above); $-gint\bar{a}$ for *-gontā is due to the influence of $v\bar{i}gint\bar{i}$. On g for c, see above. $Tr\bar{i}$ in $tr\bar{i}gint\bar{a}$ is probably a Nominative Plural Neuter. The $-\bar{a}$ in $quadr\bar{a}$ -, $qu\bar{i}nqu\bar{a}$ -, $sex\bar{a}$ is secondary. Its precise origin is uncertain. As regards $quadr\bar{a}$ -, it is best to disconnect it entirely from quattuor. It is probably an independent word.
- 14. Centum is for an Indo-European *cntom, whence the Latin form by regular phonetic process; § 102. 1. Eng. hund- in hundred is the same word. Gr. έ-κατόν has prefixed έ-, for έν, 'one.'
- 15. The Hundreds present few difficulties. On tre-centi, see 10 above. Quadringenti, octingenti (for quattuor-, octo-) have borrowed the -ing- from quingenti (for *quinq-genti; § 105. 1) and septingenti (for *septem-genti), where -ing- developed regularly. Sescenti is for sex-centi, according to § 105. 1. Sexcenti, which also occurs, is the result of 'Re-composition'; § 87. 3. On g for c in -genti, see above, 11.
- 16. Mīlle. The most probable etymology of this word is that which connects it with Greek $\chi i \lambda \omega$, Doric $\chi i \lambda \omega$ (for * $\chi i \alpha \lambda \omega$), 'thousand.' The Indo-European form of this was *gheslia, which in Latin would regularly develop as * $h\bar{e}lia$ (§§ 89; 97. 3. A.), and, by assimilation (§ 90), * $h\bar{i}lia$. The initial m would represent sm-, weak form of the root sem-, 'one,' seen in sem-per, sem-el, sim-plex, sin- $gul\bar{i}$. Cf. also Greek μ -ia for *(σ) μia . Hence originally in Latin * $sm(h)\bar{i}lia$, 'one thousand.' On m for initial sm-, see § 104. 1. b).

Ordinals.

- 184. 1. Prīmus for *pris-mos is a Superlative formation; § 89.
- 2. Secundus is from sequor, hence originally: 'the following.'
- 3. Tertius is not clear in its relation to tres.
- 4. Quartus, Quintus, Sextus are formed from the respective cardinals by adding -tus.
- 5. Septimus, Decimus are probably for an original *septm-mos, *decm-mos; see § 102. 1.

- 6. Octāvus is for an earlier *octōvus.
- 7. Nonus is for *noven-os; cf. § 183. 9.
- 8. Vicesimus and the other tens are formed with the suffix -timo-, i.e vicesimus for *vicent-timos; § 108. 1.
- 9. Centēsimus and the Hundreds. Inasmuch as the element -ēsimus was common to all the tens, it came to be felt as an independent ordinal suffix, and was appended to the stems of the hundreds, centum, ducentī, etc. The suffix -timo- would have given *centum-timus, or else *cēsimus for *cent-timus.
 - 10. Mīllēsimus follows the analogy of the hundreds.

Distributives.

- 185. 1. Singuli, from the stem sm-klo-, shows the weak form of the root sem-, 'one,' seen in sem-el, 'once,' sim-plex, sem-per, etc.
- 2. The other Distributives are formed with the suffix -no-, e.g. $b\bar{\imath}n\bar{\imath}$ for *bis- $n\bar{\imath}$; $tr\bar{\imath}n\bar{\imath}$ for *tris- $n\bar{\imath}$. Beginning with septen $\bar{\imath}$, the Distributives are formed by the suffix $-\bar{\imath}n\bar{\imath}$, which is borrowed from $s\bar{\imath}n\bar{\imath}$ (for *secs- $n\bar{\imath}$; §§ 105. I; 89). The cardinal form to which this suffix is added, usually loses its final syllable, sometimes the last two syllables, e.g. $sept(em)\bar{\imath}n\bar{\imath}$, $nov(em)\bar{\imath}n\bar{\imath}$; $d\bar{\imath}n\bar{\imath}$, $v\bar{\imath}c\bar{\imath}n\bar{\imath}$.

Multiplicatives.

- 186. 1. Semel, 'once,' is from the root sem-; § 185. 1.
- Bis is for dvis, preserved in the Glosses of Festus; § 104.
 c). Cf. Greek δίς.
- 3. Ter is for *tris (cf. Gr. $\tau \rho is$) in unaccented position. The sequence of development would be *tris, *trs, *trr, ter; §§ 106. 3; 100. 3.
- 4. Quater is for *quatur, with e for u, owing to association with ter.
- 5. The other Multiplicatives are formed by the suffix $-i\bar{e}ns$, $-i\bar{e}s$ (see § 20. 2), which is variously explained. Some see in it the Participle of $e\bar{o}$, so that $sex-i\bar{e}ns$ would mean literally 'going six.' Others identify it with the Sanskrit suffix -yant.

PRONOUNS.1

PERSONAL PRONOUNS.

- 187. First Person. 1. The Nominative Singular, ego, for earlier $eg\bar{o}$ (§ 88. 3), represents an Indo-European * $eg\bar{o}$.
- 2. The Genitive Singular, meī, is simply the Genitive Singular Neuter of the Possessive meus, used substantively.
- 3. The Dative Singular, mihi, is probably descended from an Indo-European *megh-oi or *megh-ei, Locative. This would regularly appear in Latin as *mehī (§§ 97. 3. A; 81. 2). The change of \check{e} to \check{i} took place first when *mehī was in unaccented position; § 73. 2. On the shortening of the final \bar{i} , see § 88. 3. $M\bar{i}$ may be a contraction of mihi or may be identical with Greek μoi (also Locative).
- 4. The Accusative and Ablative Singular, $m\bar{e}$, was $m\bar{e}d$ in early Latin. Possibly $m\bar{e}d$ was originally Ablative only, with the case-ending discussed in § 130. Before an initial consonant $m\bar{e}d$ would become $m\bar{e}$, remaining $m\bar{e}d$ before vowels. Assuming that the original Accusative Singular was $m\bar{e}$, the existence of $m\bar{e}$ and $m\bar{e}d$ side by side in the Ablative would naturally lead to the rise of $m\bar{e}d$ by the side of the already existing $m\bar{e}$ in the Accusative.
- 5. Nominative and Accusative Plural, nos, is apparently an inherited Indo-European formation.
- 6. Genitive Plural. Nostrum, nostrī are the Genitive Singular and Genitive Plural of the Possessive Pronoun used with substantive force.
- 7. Dative and Ablative Plural. $N\bar{o}b\bar{i}s$ has apparently borrowed its termination $-b\bar{i}s$ from $v\bar{o}b\bar{i}s$; see below.
- 188. Second Person. The Indo-European stem was tve-, with weak grade tu-. A collateral form te- also appears.

¹ See Brugmann, Grundriss, ii. §§ 407-459; Lindsay, Latin Language, chap. vii; Stolz, Lateinische Grammatik, §§ 89, 90.

- 1. Nominative Singular. $t\bar{u}$ corresponds to German $d\bar{u}$, Greek $t\bar{v}$ in Homeric $t\bar{v}v\eta$.
- 2. Genitive Singular. Tuī, like meī (§ 187. 2) is the Genitive of the Possessive Pronoun used substantively.
- 3. Dative Singular. Tibi is for an earlier *tebi; on i for z, see under mihi, § 187. 3. The origin of the termination -bi is uncertain. On the shortening of the final -ī, see § 88. 3.
- 4. Accusative and Ablative Singular. Te is for earlier ted. On the origin and relation of the two formations, see § 187. 4.
- 5. Nominative and Accusative Plural. Vos represents an Indo-European formation.
- 6. Genitive Plural. Vestrum, vestrī are of the same formation as nostrum, nostrī; see § 187. 6. Vostrum, vostrī, for vestrum, vestrī, result from association with nostrum, nostrī.
- 7. Dative and Ablative Plural. $V\bar{o}b\bar{i}s$ is formed with the suffix $-bh\bar{i}s$, the relation of $-b\bar{i}s$ in $v\bar{o}-b\bar{i}s$ to $-b\bar{i}$ in $ti-b\bar{i}$ being perhaps determined by that of ill $\bar{i}s$ to ill $\bar{i}s$; is $t\bar{i}s$ to $t\bar{i}s$.

THE REFLEXIVE PRONOUN.

- 189. The stem of the Reflexive is *sev-, with the collateral form *se-.
- 1. Genitive. Suī, like meī and tuī, is the Genitive Singular of the Possessive used substantively.
- 2. Dative. Sibi, earlier sibī, is for *sebī. See under mihi, § 187. 3. On the shortening of the final $\bar{\imath}$, see § 88. 3.
- 3. Accusative and Ablative. $S\bar{e}$ is for earlier $s\bar{e}d$. See on $m\bar{e}$, § 187. 4.

THE POSSESSIVE PRONOUNS.

- 190. These are formed by appending -os (-us) to the stems of the Personal Pronouns.
- 1. Me-us is regular. The Vocative Singular $m\bar{\imath}$ is probably in origin a Dative of Reference of the Personal Pronoun.
- 2. Tu-us is from the stem tev-, whence originally *tev-os, later tovos (§ 73. 3), preserved in early Latin. In enclitic position ov

became u, whence tuos, tuus; see § 103. 4. With Latin *tev-os, cf. Homeric Greek $\tau \epsilon(\epsilon)$ os.

3. Su-us is from the stem sev-, whence originally *sev-os, later sovos (73. 3) preserved in early Latin. In enclitic position, e.g. patrem sovom, ov became \check{u} , whence suos, suus; see § 103. 4. With primitive Latin *sev-os cf. Homeric Greek $\mathring{\epsilon}_{\Gamma}\acute{o}s$ for * $\sigma\epsilon_{\Gamma}\acute{o}s$. The weak form of the root sev- was sv-. It is this which appears in Greek $\mathring{o}s$ for $\sigma_{\Gamma}\acute{o}s$, and traces are present also in Latin, e.g. in such forms as $s\bar{s}s$ (Dat.-Abl. Plu.), for * $sv\bar{s}s$ (root svo-), found in early Latin.

According to another view suus is an independent formation, collateral with souss.

THE DEMONSTRATIVE PRONOUNS.

Hic.

- 191. 1. The stem of $h\bar{i}c$ was ho-, $h\bar{a}$ -. To the regular case-forms of this stem was added the suffix -ce, often reduced to -c; -ce itself represents a pronominal stem meaning 'here.'
 - 2. Nominative Singular.
- a) Masculine. In $h\bar{\iota}c$, the first part, $h\bar{\iota}$, is probably for ho+i, a formative element recognized elsewhere in the inflection of this pronoun. Inasmuch as oi in accented syllables regularly becomes $\bar{\iota}\iota$ (see § 81. 1), $h\bar{\iota}$ for *hoi, must have arisen in combinations where the pronoun was proclitic. Cf. $qu\bar{\iota}\iota$ for *quo-i. By the side of $h\bar{\iota}\iota$ c we find $h\bar{\iota}\iota$ c in early Latin. The relation of this to $h\bar{\iota}\iota$ c is difficult to determine. Possibly *he\(\tilde{\else}\iotac, from he- (Ablaut of ho-; § 64) was the original form, whence $h\bar{\iota}\iota$ c in unaccented syllables (§ 73. 2). Some find this *he\(\ellie{\ellie}\) in one of the Scipio inscriptions CIL. i. 32 he\(\ellie\) cepit; but \(\ellie{\ellie}\) here may be \(\bar{\ellie}\), which in early Latin sometimes stands for an open \(\bar{\ellie}\), so that $h\bar{\epsilon}\iota$ c would simply be a graphical variation of $h\bar{\iota}\iota$ c.
- b) Feminine. Haec for $*h\bar{a}$ -i-c(e), presents the formative element, -i-, appended to an original $*h\bar{a}$ (cf. $*port\bar{a}$).
 - c) Neuter. $H\bar{o}c$ is for *hod-c(e), in which -d is a case-ending

peculiar to the Pronominal Declension. The long quantity of the o is difficult to account for. Some have thought that the o was really short, and that the ante-consonantal form was $h\ddot{o}c$, e.g. $h\ddot{o}c$ templum for *ho(d)c templum (§ 105. 1), while the ante-vocalic form was hocc, e.g. hocc erat.

- 3. Genitive Singular.—The earliest form of the Genitive Singular was *hoi-os, whence hoius, preserved in early Latin. This possibly developed a parasitic j which became permanent, producing *hoijus, hūjus (§ 81. 1). In the primitive *hoi-os, -os was the Genitive ending discussed in § 138, while hoi- may be ho- + the formative element i seen in the Nominative.
- 4. Dative Singular. The earliest form of the Dative Singular seems to have been hoi-c. The causes which produced huic from this are uncertain.
- 5. Accusative Singular. Hunc, hanc are simply for earlier *ho-m-ce, *ha-m-ce, with obvious phonetic changes.
- 6. Ablative Singular.— $H\bar{o}c$, $h\bar{a}c$ for earlier $*h\bar{o}d\text{-}c(e)$, $*h\bar{a}d\text{-}c(e)$ represent the same Ablative formation as regularly seen in \bar{a} and o-stems; §§ 118; 130.
- 7. Plural Forms. These all follow the regular termination of \bar{a} -and o-stems, except the Nominative and Accusative Plural Neuter, haec, where -ai, -ae (instead of -a) represents a termination of the Pronominal Declension.

Is.

- 192. 1. The root of this pronoun is ei-, weak form i- (§ 62). By appending the suffixes -o- and $-\bar{a}$ we get the stems ejo-, $ej\bar{a}$ -, or (by disappearance of the intervocalic j) eo-, $e\bar{a}$ -.
 - 2. Nominative Singular.
- a) Masculine. Is shows the root in the weak form with the case-ending -s.
 - b) Feminine. Ea is for *ej- \bar{a} ; see above, 1.
- c) Neuter. Id shows the weak form of the root with the Pronominal case-ending -d.

- 3. Genitive Singular. The earliest formation is thought to have been eei (Locative), for *ej-ei (stem ejo-). To this was added the Genitive ending -os (-us), giving *ĕĕj-os, *ējos, ējus.
- 4. Dative Singular. Ei for *e-ei, earlier *ej-ei, was in formation a Locative from the stem ĕjo- (see 1). In the Pronouns the Locative served not only as Dative, but also as Genitive. But the Genitive (see 3) has added a further suffix for the purpose of differentiation.
- 5. Accusative Singular. Eum, eam represent an earlier *ĕjom, *ĕjam (see 1).
- 6. Ablative Singular. $E\bar{o}$ and $e\bar{a}$, earlier $e\bar{o}d$, $e\bar{a}d$, were formed from the stems $*\bar{e}jo$ -, $\bar{e}j\bar{a}$ -. The case-ending is the same as that of \bar{a} and \bar{o} -stems.
- 7. Plural Cases.—These are all formed regularly from the stems $*\check{e}jo$ -, $\check{e}j\bar{a}$ -.
 - 8. Idem is simply is with the suffix -dem.

Iste, Ille, Ipse.

- 193. These three pronouns presumably contain in their second syllable the Indo-European pronoun *so, 'he'; *s \bar{a} , 'she'; *tod, 'that.' But by association and analogy the second element has become much modified.
- 194. Iste. The first syllable of iste is of uncertain origin. It was apparently an unchangeable element. By the addition of *so, *sā, *tod, would arise *isso, *issa, *istod. The regular Accusative of *so was *tom, *tām, *tod (cf. Greek τ ov, τ av, τ o(δ)), whence *istom, *istām, *istod. The preponderance of forms with t eventually caused *issa to become ista and *isso to become *isto, later iste after the analogy of ille, ipse.
- 195. Ille. If olle was the original of ille, as is usually held, the change from o to i can be accounted for only on the ground of adaptation to such forms as iste, ipse, is. Olle, however, may be

- for *ol-so, *ol-se, whence olle (§ 106. 3). The Feminine would similarly have been *ol-sā, olla. The Neuter would have been *ol-tod, and the Accusative *oltom, *oltām, *oltod. Then the forms with ll are assumed to have gained the supremacy over those with lt.
- 196. Ipse. I- here seems the root of is (cf. early Latin eapse, eumpse, eopse, etc.), while -pse may be for -pe-se by Syncope (§ 92); -se would then represent an original so (§ 193). No traces of t-forms (§ 194) appear; the -se, -sa of the Nominative have extended to the other cases. The Neuter, ipsum (instead of *ipsud), shows transition to the Noun Declension.
- 197. Declension of Iste, Ille, Ipse.—With the exception of the forms istud, illud already mentioned, and the Genitive and Dative Singular, these all show the usual terminations of the Noun Declension. The Genitives istīus, illīus, ipsīus are formed by appending -os (-us) to istī, illī, ipsī, Locatives from the stems isto-, illo-, ipso-. These Locative formations served originally as both Dative and Genitive in the Pronouns. Later the Genitive was differentiated from the Dative; § 192. 3.

The Relative, Interrogative, and Indefinite Pronouns.

- 198. r. These are all formed from the same root, which appears as $qu\ddot{\imath}$, $qu\ddot{o}$, $qu\ddot{a}$.
- 2. Nominative Singular.—Quis shows the stem qui-with the case-ending -s. $Qu\bar{\imath}$ is for quo + i, a formative element which appears elsewhere in the Pronominal Declension; oi in accented syllables regularly becomes \bar{u} , but $\bar{\imath}$ for oi in $qu\bar{\imath}$ may perhaps be explained by the enclitic character of the word. Quae is the regular Feminine of the Relative. The formation is the same as seen in hae-c (§ 191. 2. b). Qua, which appears in the Indefinite Pronoun, follows the Noun Declension. Quo-d and qui-d append the regular pronominal termination to their respective stems.

- 3. Genitive Singular. $C\bar{u}jus$, for earlier quoius, *quoios, seems best explained like $h\bar{u}jus$; § 191. 3.
- 4. Dative Singular.—Cui seems to have developed in the first century of the Christian era from the earlier quoi; see § 14. Quoi was probably a Locative formation.
- 5. Accusative Singular. Quem for *qui-m has followed the analogy of i-stems having -em for -im, e.g. turrem, ovem, etc.; § 152.
- 6. Ablative Singular. Besides the regular $qu\bar{o}$, $qu\bar{a}$, $qu\bar{o}$, which present no peculiarities, we find $qu\bar{i}$ used for all genders and (in early Latin) for both numbers. This may have been a genuine Ablative form $(qu\bar{i}$ for $*qu\bar{i}d$), or an Instrumental.
- 7. Plural Forms. Quae is analogous to hae-c; § 191. 7. The Dative and Ablative $qu\bar{i}s$ is from the stem quo- (§ 133); it has no formal connection with quibus.

Pronominal Adjectives.

199. Several Adjectives of pronominal meaning have adopted also the Pronominal Declension in the Genitive and Dative Singular, viz. alius, alter; uter, neuter; ūllus, nūllus; sōlus, tōtus, ūnus. Alius takes also the pronominal -d in the Neuter Singular.

CONJUGATION.1

INTRODUCTORY.

- 200. As compared with Greek and Sanskrit, the Latin in its verb-system exhibits extensive deviations from the original conjugational system of the Indo-European parent-speech. The following are the most important points of difference:
- 1. The Latin has lost the augment, *i.e.* an initial e-, prefixed to the secondary tenses of the Indicative as a symbol of past time.

¹ See in general: Brugmann, Grundriss, ii. §§ 460-1086; Lindsay, Latin Language, chap. viii.; Stolz, Lateinische Grammatik, §§ 96-118.

- 2. The strong (i.e. unsigmatic) Aorist has disappeared almost entirely.
- 3. The original Perfect Indicative has become merged with the sigmatic Aorist. The result is a tense whose inflections are derived from both sources, and whose meanings are Aoristic as well as Perfect.
- 4. The original Middle Voice has disappeared, being superseded by a new inflection peculiar to Latin and Keltic.
- 5. The Subjunctive and Optative do not appear as separate moods, but have become fused into one, designated Subjunctive.
- 6. In the Imperfect and Future Indicative of the \bar{a} and \bar{c} conjugations we meet new formations in -bam and $-b\bar{o}$, which, like
 the r-Passive, are peculiar to Latin and Keltic.
- 7. In the Personal Endings the distinction between primary and secondary endings has become effaced.
- 8. Several new tense-formations have developed which are peculiar to Latin, e.g. the Perfect Indicative in $-v\bar{\imath}$ and $-u\bar{\imath}$, the Pluperfect Subjunctive in -issem, etc.

FORMATION OF THE PRESENT STEM.

201. Thematic and Unthematic Formation. — The Latin inherited two distinct types of Present formation. The one, characterized by the presence of the variable or thematic vowel (\check{e}, \check{o}) before the Personal Endings, is called Thematic. This type is illustrated by $d\bar{i}cu-nt$ (for $*d\bar{i}co-nt$); $d\bar{i}ci-tis$ (for $*d\bar{i}ce-tis$). The other type of Present formation has no thematic vowel, and hence is called Unthematic. Unthematic presents originally had Ablaut (§ 62). The strong form of the root appeared in the Singular, the reduced form in the Plural. This change was connected with primitive accentual conditions. In the Singular the accent rested on the root syllable, in the Plural on the endings.

In Greek, the Unthematic Conjugation is represented by the $-\mu$ verbs ($\tau i - \theta \eta - \mu \mu$, $\tau i - \theta \epsilon - \mu \epsilon \nu$), while $-\omega$ verbs are thematic, e.g. $\lambda \epsilon \gamma - 0 - \mu \epsilon \nu$, $\lambda \epsilon \gamma - \epsilon - \tau \epsilon$.

Classification of Present Formations.

A. UNTHEMATIC PRESENTS.

- 202. Unthematic Presents are but scantily represented in Latin; for the most part they have passed over into the thematic inflection. The following verbs are the chief representatives of the class:
 - 1. Do, da-s, dat (for earlier dat); Plural da-mus, da-tis, dant.
- 2. Eō. The two forms of the root were ei- (strong), and -i (weak). The primitive inflection was probably:

*ei-ō	*i-mos (Gr. tμεν)
*ei-s	*i-tis (Gr. tre)
*ei-t	*i-nt

In the First Singular *ei \bar{o} regularly became $e\bar{o}$ (§ 103. 1); *eis became $\bar{i}s$ (§ 82); and *eit, $\bar{i}t$, later $\bar{i}t$. The Plural seems to have early abandoned the weak form of the root in favor of the strong; $\bar{i}mus$, $\bar{i}tis$, eunt, therefore, represent *ei-mos, *ei-tis, *ei-ont.

3. Sum. — The strong form of the root is es-, the weak s-. The original conjugation, therefore, was probably:

*es-ne	*s-mos
*es-s	*s-tis
es-t	*s-get

The historical forms show considerable deviation from this. Traces of *ess are seen in the regular use of es as long in early Latin verse. The presumption is that ess represents Plautus's pronunciation. The First Singular sum probably represents a special thematic formation *s-o-m; and of the same formation are su-mus for *s-o-mos and sunt for s-o-nt. The Second Plural es-tis is formed from the strong root, like the Second Singular. Enclitic forms 's and 'st sometimes occur for the Second and Third Singular. These are often joined in writing with a previous word, e.g. bonumst = bonum 'st; morast = mora 'st. The usage is poetic and colloquial.

- 4. **Edō.** Unthematic forms occur only in the Second and Third Singular, and in the Second Plural. The root shows no Ablaut, but appears everywhere as ed- or, by euphonic change, as \bar{es} for * $\bar{e}d$ -t- (§ 108. 1); here $\bar{e}d$ represents a stronger form of the root than ed-.
- 5. Fero. The unthematic inflection is only partially preserved, viz. in fer-s, fer-t, fer-tis.
- 6. Volo. The only forms which are certainly unthematic are vult and vultis (earlier volt, voltis). The root in the Singular was normally *vel- (cf. vel-im, etc.), but *vel-t became volt after the analogy of vol-tis, for vl-tis, from weak root vl- (§ 100. 1). The Second Singular $v\bar{i}s$ is not for *vel-s, but comes from the root vei-, also meaning 'wish'; cf. in- $v\bar{i}tus$. $N\bar{o}l\bar{o}$ is for *ne $vol\bar{o}$, and $m\bar{a}l\bar{o}$ for *mag(e) $vol\bar{o}$.

B. THEMATIC PRESENTS.

203. Of these there are the following classes:

I. Root Class. — The Present stem consists of the root in its strong form + the thematic vowel ϵ/o . More exactly the root appeared in that phase of the strong grade which gave its name to the different Ablaut Series (§ 62). Thus roots of the $\check{\epsilon}$ -Series had $\check{\epsilon}$, $\epsilon i(\bar{\imath})$, $\epsilon u(\bar{\imath})$; those of the \bar{a} -Series had \bar{a} , ϵtc . The $\check{\epsilon}$ -Series is most fully represented. Examples are:

ě-Series: $leg^{-e}/_o$, root leg^- ; $teg^{-e}/_o$, root teg^- ; $veh^{-e}/_o$, root veh^- ; $deic^{-e}/_o$, root $deic^-$ (later $d\bar{\iota}c^-$; § 82); $feid^{-e}/_o$, root feid-(later fid-); $deuc^{-e}/_o$, root deuc- (later $d\bar{\iota}uc$ -).

ă-Series: ag-e-/o-, root ag-; caed-e-/o-, root (s)caid- (§ 68).

 \bar{a} -Series: $v\bar{a}d$ -e- $/_{o}$ -, root $v\bar{a}d$ -.

ē-Series: cēd-e-/o-, root cēd-.

ō-Series: rod-e-/o-, root rod-.

II. Reduplicating Class. — The Present Stem is formed by prefixing to the root + the thematic vowel e/o, a reduplicating syllable, which consists of the initial consonant of the root + \tilde{i} . The root appears in its weak form (§ 62). Examples: gi-gn-e-/o-,

root gen- (cf. Gr. $\gamma i - \gamma r - \sigma \mu a$); $s\bar{i} - d - e^{-}/_{o}$ for $s\bar{i} - sd - e^{-}/_{o}$. (§ 89), root sed-. Sistō, root stā, and se-rō for *sī-sō (§§ 98. 1), root *sē-, do not strictly belong here. They were originally unthematic formations (cf. Gr. (σ) $\bar{i} - \sigma \tau \eta - \mu \mu$, (σ) $\bar{i} - (\sigma) \eta - \mu \mu$), but have passed in Latin into the thematic conjugation; bibō is not properly a reduplicated formation. The root was pib- (cf. Skr. pibāmi; Gr. $\hat{\epsilon}\pi i\beta\delta a$ for * $\hat{\epsilon}\pi \iota \pi i\beta$ - δa). The Latin word results from assimilation of ρ to b.

- III. **T-Class.**—This class, like the preceding, is but sparingly represented in Latin. The root appears in its strong form, to which is appended $t^{\epsilon-}/_{o-}$. Examples are: $nec-t^{\epsilon-}/_{o-}$, $plec-t^{\epsilon-}/_{o-}$, $plec-t^{\epsilon-}/_{o-}$, $plec-t^{\epsilon-}/_{o-}$.
- IV. N-Class. The Present Stem is formed with a nasal infix before the final consonant of the root; to this is appended the thematic vowel e^{-}/o_{-} . The root appears in the weak form. Examples: $find^{e-}/o_{-}$, root fid^{-} ; $rump^{-e-}/o_{-}$, root rup_{-} ; $jung^{-e-}/o_{-}$, root jug_{-} . Originally the infix was confined to the Present system, but in some words, as $jung\bar{o}$, it appears throughout the entire verb, e.g. $jung\bar{o}$, $j\bar{u}nx\bar{\imath}$, $j\bar{u}nctus$.
- V. **NO-Class.** To the root in its weak form is added the suffix $n^{\mu}/_{o}$. Originally verbs of this class were unthematic. The primitive suffix was $n\bar{u}$ in the Singular, and $n\bar{u}$ in Plural. The Personal endings were appended directly to these suffixes, so that a verb like $stern\bar{o}$, for example, was once inflected:

*ster-nū-ō	*ster-nŭ-mos
*ster-nū-s	*ster-nŭ-tis
*ster-nū-t	*ster-nŭ-nt

But *ster-nu-mos, *sternutis, *sternunt(i) regularly developed phonetically to sternimus, sternitis, sternunt. These forms were identical with the thematic inflection, and hence led to sternō, sternis, sternit in the Singular, after the analogy of dīcimus, dīcitis, dīcunt to dīcō, dīcis, dīcit. Other examples are sper-nō, temnō, li-nō, si-nō, tollō for *tļ-nō (§ 100. 1).

VI. SCO-Class. — The Present stem is formed by appending $sc^{e-}/_{o-}$ to the root, e.g. $h\bar{\imath}$ - $sc\bar{o}$, $gl\bar{\imath}$ - $sc\bar{o}$, $cr\bar{e}$ - $sc\bar{o}$, $(g)n\bar{o}$ - $sc\bar{o}$, $posc\bar{o}$ for *porc- $sc\bar{o}$, $su\bar{e}sc\bar{o}$ for *su $\bar{e}d$ - $sc\bar{o}$.

Many secondary formations also occur, as gemī-scō, tremē-scō; especially derivatives from contract verbs, as flōrēscō from flōreō; lābāscō from lābō; and even from nouns and adjectives, as lapidēscō, rōrēscō, dūrēscō.

- VII. JO-Class. The Present Stem is formed by appending the suffix $j^{e-}/_{o-}$ to a root or stem. Several different formations must be distinguished.
- a) j^{e-}/o . Presents from roots ending in a consonant. Here j becomes i, e.g. $jac-i\bar{o}$ for $*jac-j\bar{o}$; $capi\bar{o}$ for $*cap-j\bar{o}$, and all the so-called verbs in $-i\bar{o}$ of the Third Conjugation. Some verbs originally of this formation have passed over into the inflection of contract verbs in $-i\bar{o}$, $-\bar{i}re$ (see b, below), e.g. $veni\bar{o}$, $ven\bar{i}re$.
- b) j^{e} -/_o- Presents from roots and stems ending in a vowel. The j, here becoming intervocalic, disappears and the concurrent vowels (except in the First Singular of \bar{e} and $\bar{\imath}$ -verbs) regularly contract. Examples:
- 1) Monosyllabic roots: implē-mus for *implē-jo-mos, root plē-; intrāmus for *intrājomos, root trā-.
- 2) Dissyllabic verb-stems: domāmus for *do-mājo-mos, stem domā-.
- 3) Noun and Adjective stems in $-\bar{a}$, \check{e} , \check{i} : $c\bar{u}r\bar{a}mus$, stem $c\bar{u}r\bar{a}$ -; $rub\bar{e}mus$, stem $rub\check{e}$ -; $f\bar{\imath}n\bar{\imath}mus$, stem $f\bar{\imath}n\check{\imath}$ -.

These \bar{a} -contracts form the so-called First Conjugation, the \bar{c} -and \bar{c} -contracts the Second Conjugation, and the \bar{c} -contracts the Fourth Conjugation.

- c) Causatives in $ej^{e}/_{o}$, e.g. mon- $e\bar{o}$, doc- $e\bar{o}$, torr- $e\bar{o}$. These all take the o-phase of the strong form of the root (§ 64). They regularly suffer contraction and form a part of the Second Conjugation.
- d) Verbs in -ojo- probably once existed in Latin, but have disappeared. Thus $ar\bar{o}$, $ar\bar{a}re$ was probably originally * $aro\bar{o}$ (for

* $aroj\bar{o}$); cf. Gr. $a\rho \acute{o}\omega$. The adjective $aegr\bar{o}tus$ is likewise possibly to be referred to an original * $aegr\bar{o}$.

TENSE FORMATION IN THE INDICATIVE.

The Imperfect.

204. The termination -bam in the Imperfect Indicative is plausibly explained as representing an Indo-European Aorist, *bhvām, from the root bhu-. This seems to have been appended to some oblique case of a noun derived from the stem of the verb. The primitive formation would be represented by *amābhvām, *monēbhvām, *legēbhvām, *audībhvām. On b for bh in the interior of words, see § 97. 1. b; bhv- regularly becomes b, e.g. superbus for *super-bhv-os. This theory of the origin of the Latin Imperfect finds confirmation in Slavonic, where the Imperfect consists of a case-form of a verbal noun + the past tense of the verb 'to be.'

Early Latin has both -ibam and $-i\bar{c}bam$ in verbs of the Fourth Conjugation. The ending $-i\bar{c}bam$, however, is later in origin than -ibam, and was borrowed from $i\bar{o}$ -verbs of the Third Conjugation, e.g. $capi\bar{c}bam$.

Some have thought that the element preceding the -bam in the Imperfect was an old Infinitive. Cf. \(\bar{i}\)-licet, lit. 'it is permitted to go'; \(sc\bar{i}\)-licet, 'it is permitted to know'; \(vid\bar{e}\)-licet, 'it is permitted to see'; also such compounds as \(ar\bar{e}\)-faci\(\bar{o}\), 'to make dry.'

Eram for earlier *es- $\bar{a}m$ (§ 98. 1) exhibits the same practurate formation as that assumed for *-bhv- $\bar{a}m$ in $am\bar{a}bam$, etc.

The Future.

205. 1. The Future in $-b\bar{o}$. —The Future in $-b\bar{o}$ is analogous to the Imperfect in -bam; $-b\bar{o}$ is probably the Present of the root bhu-, so that $am\bar{a}b\bar{o}$ (for $*am\bar{a}-bhv\bar{o}$; § 204) literally means 'I become loving.' Cf. the analogous German ich werde lieben. On $am\bar{a}$ -, $mon\bar{c}$ - in this formation, see § 204. The Future in $-b\bar{o}$ is

found also in verbs of the Fourth Conjugation in early Latin, e.g. $sc\bar{t}b\bar{o}$, $aud\bar{t}b\bar{o}$.

- 2. The Future in -am. This formation, regular in the Third and Fourth Conjugations, is in reality a Subjunctive, or rather two Subjunctives, that have taken on Future force. The 1st Singular in -am (for *- $\bar{a}m$) is an \bar{a} -Subjunctive; the remaining forms are \bar{a} -Subjunctives. See §§ 221; 222.
- 3. The Future in -s \bar{o} . This formation appears in such archaic forms as $d\bar{i}x\bar{o}$, $fax\bar{o}$, which are in reality Aorist Subjunctives that have taken on Future force. The Future of sum, $er\bar{o}$, is similarly a Present Subjunctive, for *es- \bar{o} (§ 98. 1); ef. Homeric Greek $\bar{e}(\sigma)\omega$, Attic $\bar{\omega}$ (by contraction).

The Perfect.

THE REDUPLICATION.

206. 1. In Verbs beginning with a Consonant.—The Reduplication in such verbs regularly consisted of the initial consonant + e. Where the root began with sc, sp, or st, the sc, sp, or st appeared in the reduplicating syllable, but the s was lost in the root syllable, e.g. sci-ci-dī (early Latin), spopondī, ste-tī. The reduplicating vowel, e, was assimilated to the root vowel when the latter was the same in the Perfect as in the Present, e.g. mo-mordī, sci-cidī, pu-pug-ī, di-dic-ī, spo-pond-ī; but the original forms with e are often found in early Latin, e.g. memordī, pepugī, spepondī, fhefhaked CIL. xiv. 4123.

The Reduplication has disappeared very largely in Latin, yet traces of its earlier presence are sometimes distinguishable, e.g. in rettulī for *rė-(te) tulī (§ 92); repperī for rė-(pe) perī; reccidī for *rė-(ce) cidī. In the same way fidī, scidī represent an earlier *fefidī, *scecidī (cf. early Latin scicidī).

2. In Verbs beginning with a Vowel.— The Reduplication here consisted in prefixing e. Only a few verbs have preserved it, e.g. $\bar{e}g\bar{i}$ for *e-agī; $\bar{e}d\bar{i}$ for *e-edī; $-\bar{e}p\bar{i}$ (for *e-apī) in coepī, for *co- $\bar{e}p\bar{i}$, root ap-; $\bar{e}m\bar{i}$ for *e- $\bar{e}m\bar{i}$.

STEM FORMATION OF THE PERFECT.

A. The Primitive Perfect.

207. In the Indo-European parent-speech the accent rested on the root syllable in the Singular of the Perfect, but on the Personal Ending in the Plural. It was probably owing to these primitive accentual conditions that the strong form of the root appeared in the Singular, the reduced form in the Plural. The special phase of the strong form appearing in the Singular was that containing \bar{o} or \bar{o} (see the various Ablaut Series, § 62 ff.). Several of the Indo-European languages, as Sanskrit, Greek, the Teutonic, have preserved with more or less fulness the original Ablaut of the root in the Perfect; 1 but in Latin there has been a uniform 'levelling'; either the strong form has invaded the Plural (the usual sequel), or the weak form has invaded the Singular. Examples of the former process may be seen in totondimus, spopondimus; of the latter in -ce-cid-i, tu-tud-i. In most Latin verbs. however, other formations have largely displaced both of those just mentioned. This has come partly as the result of phonetic changes, partly from the workings of analogy. The whole subject is too intricate for detailed consideration here. See Lindsay, Latin Language, p. 494 f.

B. The Perfect in -sī.

208. The Perfect in $-s\bar{\imath}$, which appears chiefly in roots ending in labial, dental, and guttural mutes, is by origin an Aorist which has passed over to the Perfect inflection. Cf. Latin $d\bar{\imath}x-\bar{\imath}$ with

¹ Cf., for exam	mple, Greek	
	olð-a	ί δ-μ εν
or Gothic	ol σ - $ heta$ a	ίσ-τε
	ο ໄ δ- ε	ΐσ-ασι,
	vait	vit-um
	vaist	vit- u þ
	vait	vit-un
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Greek ἔ-δειξ-a. Some verbs have preserved both the true Perfect and this Aorist Perfect, e.g. pepercī and parsī; pupugī and (in compounds) -punxī; pepigi and (in compounds) -panxī.

C. The Perfect in -vī.

209. The Perfect in $-v\bar{\imath}$ is a new formation which has developed in the separate history of Latin itself. The origin of this suffix is not clear; according to one theory, $-v\bar{\imath}$ is borrowed from such Perfects as $f\bar{a}v\bar{\imath}$, $l\bar{a}v\bar{\imath}$, $f\bar{o}v\bar{\imath}$, $m\bar{o}v\bar{\imath}$, $v\bar{o}v\bar{\imath}$, $j\bar{u}v\bar{\imath}$, where v really belongs to the stem.

D. The Perfect in -uī.

210. The Perfect in $-u\bar{\imath}$ is a development of that in $-v\bar{\imath}$; $-v\bar{\imath}$ is thought to have been added to extended forms of the root, e.g. *gen-e- $v\bar{\imath}$ (root gen-), *dom-a- $v\bar{\imath}$ (root dom-), whence genu $\bar{\imath}$, domu $\bar{\imath}$; § 103. 4. From forms like these the category might easily extend itself. Its diffusion was probably assisted by the existence of such Perfects as $fu\bar{\imath}$, $\rho lu\bar{\imath}$ for early $fuv\bar{\imath}$ (Ennius), $\rho l\bar{u}v\bar{\imath}$, etc.

THE INFLECTION OF THE PERFECT.

- 211. In its inflection the Latin Perfect presents a mingling of Perfect and Aorist forms. The exact determination of the details of this fusion furnishes one of the most difficult problems of historical Latin grammar; the following explanations can claim only a certain degree of probability.
- 212. The type of Perfect inflection existing in Latin prior to the fusion of Perfect and Aorist may be partially reconstructed as follows:

SINGULAR.	PLURAL.
I. vidi 1	vīd-i-mus
2. ?	?
3. *vide	*vid-ent (for *vid-pt)

¹ No attempt is here made to discuss Ablaut changes.



Of these forms $v\bar{u}d\bar{v}$ in the First Singular represents an Indo-European middle, *vid-ai. The Second Singular and Second Plural cannot be conjectured with any degree of satisfaction.

213. The type of Aorist with which the true Perfect was ultimately fused was a formation consisting of the root + the suffix -es- (-is-; § 73. 2), to which the Personal Endings were appended directly (unthematic formation; § 201). The inflection may be reconstructed as follows:

	Singular.	Plural.
ı.	*vid-er-em (for *vid-es-m; §§ 98.1; 102.1)	vīd-i-mus (for *vīd-is-mos)
2.	*vid-is (for *vid-is-s)	vīd-is-tis
3.	*vīd-is-t	*vid-er-ent (for *vid-is-nt)

214. The identity of the First Plural of the Perfect and Aorist seems to have furnished the starting-point for the formal fusion of the two tenses; vidistis in the Second Plural is the Aorist form; so is viderunt in the Third Plural, with *-ent changed to -unt after the analogy of other tenses, e.g. regunt, amāb-unt; ē (for ĕ) in -erunt is of uncertain origin. Probably it was borrowed from the Perfect Third Plural in -ere, which is certainly a different formation, though not at present well understood. The scansion -ĕrunt, frequent in poetry, preserves the earlier quantity. In the Singular, vidi has already been explained as originally a Middle which has assumed the function of the Active. The Second Singular vidisti is difficult of explanation. Possibly the primitive form of the Second Singular Perfect may have been *vīstī. so vīdistī may be a contamination of *vīstī (Perfect) and *vīdis (Aorist), helped on by the influence of the Second Plural vidistis. The assumption of a Perfect *vīstī, however, involves difficulties. The Personal Ending of the Second Singular Perfect was -tha in Indo-European. Cf. Greek οἶσθα for *ροιδ-θα. In Latin -thă should become -te (§ 71.1). Influence of the Second Singular Middle ending *-sai (= Latin -sī) has been suggested. The Third Singular *vide early assumed the regular Personal Ending.

t, of the other tenses. This gave * $v\bar{u}det$, $v\bar{u}dit$. Some have thought that in the true Perfect in Latin the primitive Third Singular was * $v\bar{u}d\bar{t}$ (a Middle form, like the First Singular). Some evidence in favor of this view is found in the frequent long quantity of $-\bar{t}t$ in early Latin poetry.

The Pluperfect.

215. The Pluperfect Indicative in -eram is a development of the Aorist mentioned above in § 213. The starting-point of development was the First Singular. This was first *vīdĕrem, which became vīderam, apparently under the influence of the Imperfect in -bam. The remaining inflection also follows the Imperfect.

The Future Perfect.

216. The Future Perfect Indicative is an Aorist Subjunctive. Thus $v\bar{\imath}der\bar{\nu}$ is for a primitive *veid-es- $\bar{\nu}$ (§ 98. 1), in which -es- is the same Aorist suffix as already mentioned in §§ 213, 215. Greek $\epsilon i\delta\hat{\omega}$, which has become a part of the Perfect system, represents the same formation, being for *fe $\iota\delta$ - $\epsilon\sigma$ - ω , whence regularly $\epsilon i\delta$ - $\epsilon\omega$ (Homer), $\epsilon i\delta\hat{\omega}$ (Attic).

The inflection follows that of Presents in $-\bar{o}$, -is, -it, except in the 3d Plural, which has -int instead of -unt, probably owing to the influence of the Perfect Subjunctive, with which it regularly agrees in the other persons and numbers.

THE OPTATIVE.

217. There were two Optative formations in Indo-European, a thematic and an unthematic. Greek $\lambda \acute{v}$ - ι - μ represents the former, $\sigma \tau \alpha$ - $\acute{\iota} \eta$ - ν the latter. In Latin probably only the unthematic type is to be recognized. Owing to the thorough fusion of Optative and Subjunctive (§ 353) all Optative forms are traditionally known as Subjunctives.

218. Present Optative. — Only a few forms occur. The special suffix of the unthematic Optative was $-i\bar{e}$ - in the Singular, $-\bar{i}$ - in the Plural.

Thus the primitive inflection of the Present Optative of the root es-, 'to be,' was:

Singular.	Plural
1. *s-ië-m (siem; 88. 3)	s-ī-mus
2. s-iē-s	s-ī-tis
3. s-iē-t	*s-ī-nt (s-i-nt)

The classical inflection of the Singular, sim, sīs, sit, is not original, but is formed after the analogy of the Plural. Similarly in early Latin we find siemus, sietis, sient after the analogy of siem, etc. The weak form of the root, as above, regularly appeared in this formation. Other illustrations of this Optative are velim (for *vel-ie-m, after vel-i-mus), nolim, malim, edim (edo, 'eat'), du-im, possim.

219. Aorist Optative. — The so-called Perfect Subjunctive in -erim is by origin an Aorist Optative. The tense is formed by means of the Aorist suffix -es- already mentioned in §§ 213, 215, to which is further appended the Optative suffix $i\bar{e}$ -, \bar{i} - (§ 218). Thus the original inflection of $v\bar{i}$ derim was:

*veid-es-ië-m	*veid-es-ī-mus
*veid-es-ië-s	*veid-es-ī-tis
*veid-es-iē-t	*veid-es-i-nt

By change of ei to $\bar{\imath}$ (§ 82) and by rhotacism (§ 98. 1) this gave * $v\bar{\imath}deri\bar{e}m$, etc., Plural $v\bar{\imath}deri\bar{n}mus$. But the $i\bar{e}$ of the Singular was early changed to $\bar{\imath}$ after the analogy of the Plural, giving $v\bar{\imath}derim$, $v\bar{\imath}deris$, $v\bar{\imath}derit$. The long vowel was sometimes retained in the (rare) 1st and 2d Plural.

Latin *vūderiem is identical with Greek εἰδείην (for *ρειδ-εσ-ιη-ν), which, like εἰδῶ (see § 216), has become associated with the Perfect system.

Another Aorist formation was by means of the suffix s in place of -is. This is seen in $d\bar{\imath}xim$, faxim, ausim, for earlier $*d\bar{\imath}c$ -s- $i\bar{c}$ -m, etc.

THE SUBJUNCTIVE.

- **220.** Two formations, both descended from Indo-European, are to be recognized. One of these is characterized by the suffix \bar{a} and is confined exclusively to the Present tense; the other is characterized by the suffix \bar{c} , and appears not only in the Present, but in the other tenses as well. Both these suffixes take the place of the thematic vowel of the corresponding Indicative formations.
- 221. Ā-Subjunctives. Examples are moneam (for *mone-jā-m), reg-a-m, audiam, earlier *regām, *audiām; § 88. 2.

222. E-Subjunctives.

- 1. Amem (for *amā-jē-m) evidently has preferred this type, to avoid the identity of Indicative and Subjunctive which would have resulted from the \bar{a} -formation here; *amā-jā-m, etc., would have given *amām, *amās, *amāt.
- 2. The so-called Future Indicative of the Third and Fourth Conjugations is (outside the First Singular) a Present Subjunctive of the \bar{e} -formation which has taken on Future function, e.g. $fer-\bar{e}$ -s, audi- \bar{e} -s, etc.
- 3. The Imperfect Subjunctive also belongs here. There are two types, both Aorists in origin:
- a) -s- Aorists. Examples are: es-s-em, ferrem for *fer-s-ēm (§ 106. 3), vellem for *vel-s-ēm (§ 106. 3); amā-r-em for *amā-s-ēm (§ 98. 1); monē-r-em for *monē-s-ēm, audī-r-em for *audī-s-ēm.
 - b) -es- Aorists, e.g. reg-er-em for *reg-es-em (§ 98. 1).
- 4. The Pluperfect Subjunctive is an -es- Aorist, with a second s of uncertain origin, i.e. vūdissem for *vīd-es-s-ēm.

THE IMPERATIVE.

A. Active.

- **223.** Present, Second Singular. The most probable view is that which regards this form as consisting of the simple stem. The Imperative, then, will be analogous to the Vocative, to which it bears in general meaning a strong resemblance. Examples are: \bar{i} , es, fer, leg-e, am \bar{a} (for *am \bar{a} -je), mon \bar{e} (for *mone-je), aud \bar{i} (for *aud \bar{i} -je). Verbs in $-i\bar{o}$ of the Third Conjugation follow the root class (§ 203. 1), e.g. cape. $D\bar{i}c$, $d\bar{u}c$, fac are probably for $d\bar{i}ce$, $d\bar{u}ce$, face by dropping off the final short e.
- 224. Present, Second Plural. This is formed by adding -te to the stem, e.g. \(\bar{\text{i-te}}\), \(\text{fer-te}\), \(\text{es-te}\), \(\text{legite}\) (for *\(\text{lege-te}\); \(\frac{9}{3}\). 2), \(am\bar{a}te\), \(mon\bar{c}te\), \(aud\bar{t}te\).
- 225. Future, Second and Third Singular.—The termination is $-t\bar{o}$, earlier $-t\bar{o}d$, appended to the Present Stem, e.g. $\bar{\imath}t\bar{o}$, ferto, esto, legito, etc. Originally this formation had Plural as well as Singular force. Strictly, too, it was a Present, not a Future; the Future force is a special development of the Latin. The ending $-t\bar{o}d$ is preserved in early Latin, e.g. licetod, datod, violatod.
- 226. Future, Second and Third Plural.—The termination of the Second Plural -tōte is simply a pluralization of the Singular -tō. The Third Plural termination -ntō is a new formation (cf. § 225) after the analogy of the relation existing between the Third Singular and Third Plural of the Present Indicative, i.e.

suntō : estō :: sunt : est reguntō : regitō :: regunt : regit amantō : amātō :: amant : *amāt

B. Passive.

227. The Present. — The Second Singular ending -re represents an original -so, so that Latin seque-re corresponds exactly to Greek $\tilde{\epsilon}\pi\epsilon(\sigma)o$, $\tilde{\epsilon}\pi\sigma\upsilon$. The Second Plural in -minī is probably an

old Infinitive which has taken on the function of the Imperative. Cf. the Homeric use of the Infinitive as an Imperative. According to this view Latin $legi-min\bar{\imath}=Greek$ $\lambda\epsilon\gamma\acute{\epsilon}\mu\epsilon\nu\alpha\iota$, both forms being originally the Dative of a verbal noun with the suffix -men. Cf. ger-men, Dat. ger-min $\bar{\imath}$.

228. The Future forms are the result of appending the Passive -r (\s 235) to the corresponding Active forms.

THE PERSONAL ENDINGS.1

A. Active.

- **229. 1st** Singular. In the Indo-European parent-speech $-\bar{o}$ was the termination of the primary tenses of the Thematic Conjugation, while -mi was the termination of the Unthematic Conjugation. Secondary tenses had -m only. Latin shows no traces of -mi (on sum, see § 202. 3); $-\bar{o}$ appears in the Present, Future, and Future Perfect Indicative. Elsewhere in the Indicative and everywhere in the Subjunctive (including some original Optatives) -m appears, e.g. $am\bar{a}bam$, $am\bar{a}veram$, sim, essem, etc.
- 230. 2d Singular. The Indo-European endings were -si (primary) and -s (secondary). Latin -s may represent the secondary ending, or original *-si may have lost its final short vowel, so that *legis*, for example, may be either for *leg-e-s or *leg-e-si.
- 231. 3d Singular. The Indo-European endings were -ti (primary) and -t (secondary). Apparently in the earliest Latin, -t had become -d. Cf. early inscriptional forms, e.g. vhevhaked, feced, fecid, sied; -ti, on the other hand, became -t and very early supplanted the -d of the secondary tenses. The closely related Oscan dialect exhibits this distinction of -d and -t assumed for early Latin.

¹ The endings of the Perfect Indicative and of the Imperative have already been considered in §§ 211 ff., 223 ff.

- 232. rst Plural.—The only ending appearing in Latin is -mus, earlier *-mŏs, which seems to stand in Ablaut relation (\S 62) to Greek - μ es (dialectal).
- 233. 2d Plural. The Latin ending -tis probably represents an Indo-European -thes, which was the ending of the 2d Dual.
- 234. 3d Plural. The Indo-European endings were -nti (primary) and -nt (secondary). In the Italic languages -nti became -nt, while -nt became -ns. Oscan and Umbrian preserve this distinction, but in Latin, *-ns has disappeared, being everywhere supplanted by -nt (for -nti).

B. Passive.

- **235.** The distinguishing characteristic of the Latin Passive is the presence of final r. This formation, in its wide application, is found only in the Italic and Keltic groups of the Indo-European family. Its origin is not clear. Some have connected it with the Sanskrit ending -re of the Perfect Middle. One thing is perfectly certain: Latin r does not arise from the reflexive $s\bar{e}$ as was formerly held. In general the Latin Passive is an outgrowth of an earlier Middle. With the exception of the 1st Singular and 1st Plural, Middle forms are seen to have been at the basis of the developed inflection.
- **236.** rst Singular. Where the Active form ends in $-\bar{o}$, the Passive is formed by adding r, e.g. regor (earlier $-\bar{o}r$; § 88. 2), $am\bar{a}bor$. Where the Active ends in -m, the Passive has r instead of -m, e.g. amer, $am\bar{a}bar$.
- 237. 2d Singular. This is in origin a Middle, formed with the Indo-European ending *-so, the termination of secondary tenses in the Middle. Thus sequere is for *seque-so (§ 98. 1). Cf. Greek ἔπε-(σ)o, ἔπου. The ending -ris arises secondarily from -re by further appending -s, the ending of the 2d Singular Active.

Thus sequeris for *sequere-s (§ 73. 2). This was possibly the result of an effort to distinguish the Indicative 2d Singular from the Imperative.

- 238. 3d Singular. To the original Middle formation, e.g. *leg-i-to, for *leg-e-to, with secondary ending -to (cf. Greek è-λέγ-e-το) was added the Passive -r, e.g. *legito-r, legitur.
- 239. 1st Plural. In place of -s of the Active ending -mus we have the Passive -r, e.g. regimu-r.
- 240. 2d Plural. We have here a periphrastic formation; legiminī, etc., stand for legiminī estis, in which legiminī is a Middle Participle of the same type as Greek λεγό-μεν-οι. This formation must have originated in the Present Indicative; legēbāminī, legēminī, legēminī, legēminī are all secondary, formed after the analogy of legiminī.
- 241. 3d Plural. The 3d Plural, like the 3d Singular, was originally a genuine Middle formation, in -nto, the termination of the secondary tenses, e.g. *legunto for *lego-nto (cf. Greek ε-λέγο-ντο). To this was added the Passive -r, e.g. *lego-ntor, leguntur.

THE INFINITIVE.

242. In Latin, as in other Indo-European languages, the Infinitives are oblique cases of verbal nouns which have become stereotyped by usage. The Dative and Locative cases have contributed most largely to this eategory.

A. Active.

243. Present. — This was apparently in origin the Locative of a noun with an -es-, -os- suffix. Thus reg-er-e for a primitive *reg-es-i (§ 141), as though from a Nom. *reg-os. Unthematic verbs appended -se (for -si), e.g. es-se, fer-re, for *fer-se; vel-le for *vel-se.

- **244.** Perfect. The Locative -s-e (for si) is appended to the -es- Aorist stem (§ 213, 215), e.g. $v\bar{u}d$ -is-se.
- 245. Future. In such forms as dictūrum esse, it is probable that originally dictūrum was not a participle, but an Infinitive. The form has been plausibly explained as being contracted from dictū *erom, where dictū is Supine, and *erom (for *es-om; § 98. 1) the old Infinitive of the root es- (-esse). This Infinitive is preserved in Oscan and Umbrian, though lost in Latin. The original force of dictū *erom would be 'to be for saying,' i.e. 'to be about to say' (on dictū see § 252. 2). The foregoing explanation accords excellently with the use of dictūrum and similar forms without esse and (in early Latin) with a Plural subject, e.g. crēdō inimīcōs meōs hōc dictūrum, 'I believe my enemies are for saying this,' i.e. 'will say this' (C. Gracchus, cited by Gellius, i. 7). After the analogy of periphrastic forms, dictūrum esse subsequently supplanted dictūrum, etc., and thus gave rise to the Future Active Participle in -ūrus, -a, -um.

B. Passive.

246. Present. — Such forms as $reg.\overline{i}$, $d\overline{i}c.\overline{i}$ are Dative forms; § 139. Other verbs append the Dative ending to -es-stems, e.g. $am\overline{a}r\overline{i}$, $mon\overline{e}r\overline{i}$, $aud\overline{i}r\overline{i}$, for *am\overline{a}-es-i, etc.; so ferr\overline{i}\$ for *fer-s-\overline{i}\$. Cf. § 243. No Passive signification originally attached itself to these Dative Infinitives; at the outset they could not have differed essentially from the Locative Infinitives of the Active. The differentiation into Active and Passive meanings was purely arbitrary.

The Passive Infinitive in -ier (archaic and poetical) is of uncertain origin. Some explain agier, for example, as for *agī-ar, ar being the Preposition seen in ar-biter, etc., in a post-positive use. On -er for -ar, see § 71. 1. Others think that -er represents the apocopated Active ending -ere. This seems to have been fairly frequent in colloquial Latin, e.g. biber for bibere; tanger for tangere. Agier, therefore, and similar forms would represent Passive Infinitives with an added Active termination.

247. Perfect and Future. — Periphrastic forms are used here, e.g. dictus esse, dictum $\bar{\imath}r\bar{\imath}$. The latter consists of the Supine combined with the Passive of $e\bar{o}$ in its impersonal use.

THE PARTICIPLES.

- 248. Present Active. The suffix here is -nt-, e.g. -sēns for *-s-ņt-s (§ 102. 1) in ab-sēns, prae-sēns; regēns for *rege-nt-s. The oblique cases of tēns are formed from the stem *ei-o-, e.g. euntis for *ei-o-ntis.
 - **249**. Future Active. See § 245.
- 250. Perfect Passive. The suffix was -tus, earlier -tos, appended originally to the weak form of the root, e.g. dic-tus, ductus, tentus for *tn-tos (§ 102. 1). Where the root ended in d or t, ss or s arose phonetically (§ 108. 1), e.g. sessus for *sed-tos; ūsus for *ūt-tos. By an extension this spurious ending, -sus, became appended also to some guttural and liquid stems, e.g. lāp-sus, fixus, pulsus.
- 251. The Gerundive. The origin of the termination -endus, -undus is not yet determined.

GERUND AND SUPINE.

- **252.** 1. The Gerund. The Gerund is probably a development of the Gerundive. Such expressions as *virtūs colenda est* might easily give rise to a *colendum est* (impersonal), while similarly patriae dēfendendae causā might generate a dēfendendī causā.
- 2. The Supine. The Supine in -um is an Accusative of a Verbal noun formed with the suffix -tu; the Supine in $-\bar{u}$ is a Locative from the same stem (cf. § 163).

CHAPTER VIII.

ADVERBS AND PREPOSITIONS.

ADVERBS.1

- 253. Adverbs are, in the main, case-forms which have become stereotyped as the result of highly specialized usage. The cases most frequently thus employed are the Accusative, Ablative, Locative, and Instrumental.
- **254.** Accusatives.—These result from various syntactical usages. Thus:
- 1. Accusative of Result Produced (Gr. § 176. 2; 3), e.g. multum, plerumque, plurimum, aliquid, facile, fortius, etc.
 - 2. Appositives, e.g. vicem, partim, etc.; § 310.
 - 3. Limit of Motion, e.g. forās.

255. Ablatives. — Here belong:

- 1. Adverbs in -ē (for -ēd; § 130) from ŏ-stems, e.g. pulchrē, sānē; certissimē.
- 2. Adverbs in $-\bar{o}$ (for $-\bar{o}d$; § 130) from \bar{o} -stems, e.g. cert \bar{o} , continu \bar{o} . Cf. early Latin merit $\bar{o}d$.
- 3. Adverbs in $-\bar{a}$ (for $-\bar{a}d$; § 118) from \bar{a} -stems, e.g. extr \bar{a} , supr \bar{a} , $\bar{i}nfr\bar{a}$, contr \bar{a} , supr \bar{a} , ultr \bar{a} , citr \bar{a} , $\bar{j}\bar{u}xt\bar{a}$. Cf. early Latin exstr $\bar{a}d$, supr $\bar{a}d$. Many words, clearly Ablative in form, apparently became Adverbs through the medium of Instrumental constructions, e.g. $\bar{u}n\bar{a}$, $r\bar{e}ct\bar{a}$, $qu\bar{a}$, $e\bar{a}$, $e\bar{a}dem$ (sc. $vi\bar{a}$), etc. Cf. § 341.5.

¹ See especially Lindsay, Latin Language, chap. ix.

256. Locatives. — Here belong:

- 1. True Locatives, e.g. herī, vesperī, humī, bellī, mīlitiae, domī postrīdiē (§§ 126; 173), merīdiē, die crāstinī; noctū; also the Pronominal Adverbs hī-c, illī-c, istī-c (§ 197).
 - 2. Ablative in Locative function, e.g. forīs.

257. Instrumentals. — Here belong:

- 1. cito, modo for *cito, *modo (§ 88. 3), where *- \bar{o} resulted by contraction from *cito- \bar{a} , *modo- \bar{a} . Had these been Ablative (*citod, *modod), the \bar{o} would not have been shortened upon the disappearance of the -d.
- 2. beně, malě for *benē, *malē (§ 88. 3), where *-ē resulted by contraction from *bene-ă, *male-ă. Had these been Ablatives (*benēd, *malēd), the -ē would not have been shortened upon the disappearance of the -d.
 - 3. sponte, forte, repente.
- 258. Even a few Nominatives have become Adverbs, e.g. adversus; rūrsus for reversus; prorsus for proversus.
- 259. Many Adverbs were originally phrases, e.g. dēnuō for dē novō (§ 103. 4); īlicō for in *stlocō (§ 89); admodum. Some have thought that Adverbs in -iter also belong here, e.g. breviter for breve iter, etc. Cf. German kurzweg.

PREPOSITIONS.1

260. Prepositions are in the main Adverbs which have come to have special uses in connection with certain cases. Historically they belong to a relatively late period in the development of language. Originally the cases alone sufficed for denoting relations, but as greater precision became necessary, the requisite definiteness of meaning came to be expressed by various Adverbs, which

¹ See especially Lindsay, Latin Language, chap. ix.

ultimately crystallized as Prepositions; yet an independent adverbial usage often remained.

In the earlier period of their employment, Prepositions enjoyed considerably more latitude of usage than later, being freely combined with almost any oblique case; ultimately, however, most of them became restricted to combination with particular cases. This is truer of Latin, for example, than of Greek, where the older freedom is quite apparent. The Oscan and Umbrian also show greater latitude than Latin.

- 261. A, ab, abs, au-. Three historically independent words of identical meaning are here to be recognized:
 - 1. \overline{A} is identical with Sanskrit \overline{a} , West Germanic \overline{o} .
- 2. Ab, abs go back to an Indo-European *apo, Greek & $\pi\delta$. By loss of the final o, this became in Latin ap-, seen in ap-erio. But in composition and in phrases before voiced consonants p became b, e.g. abdō for *ap-dō; ab rādīce for *ap rādīce, and ultimately the form with b supplanted that with p. Abs is formed from ab by appending -s, probably the Genitive ending in its weak form (§ 138), an element frequently employed in amplifying prepositional and adverbial formations. Cf. ex (= ec-s) from ec-; sub-s (in suscipiō for *sub-s-cipiō; § 105. 1) from sub; obsfrom ob; also Greek è by the side of èx; èvs, whence Attic eis, by the side of èv; à $\mu\phi$ 6 by the side of $\mu\phi$ 6.
- 3. Au-, Sanskrit ava, goes back to an Indo-European ava. It appears in Latin only in aufugiō, and auferō for *ava-fugiō, *ava-ferō by Syncope (§ 92). Cf. auspex for *av(i)spex; augurium, etc.
- 4. A form of *apo, with aphæresis of the initial consonant, is po-, seen in $p\bar{o}n\bar{o}$ for *po-s(i) $n\bar{o}$ (§§ 92; 89); cf. po-situs. Poalso possibly appears in po-li \bar{o} (root li-; cf. li- $n\bar{o}$), 'rub off, polish.'
- 5. A form af, found in early inscriptions and occasionally later, is of uncertain origin. It is probably historically distinct from all the preceding words.

- **262.** Ad is obscure in origin. In early Latin inscriptions we find a form ar, used before f and v in composition, e.g. arfuerunt, arversus; also ar-biter. Whether ar- was a phonetic variant of ad-, or a different word, is uncertain.
 - 263. Ambi-, Greek ἀμφί, is probably an old Locative.
 - 264. Ante for *anti, Greek ἀντί, is probably an old Locative.
- **265.** Apud seems to be Indo-European *apo (\S 261. 2) with an appended d.
- 266. Circum, circā, circiter are all connected with the noun circus, 'ring, circle, circus'; circum is the Accusative Singular, used first as Adverb, later as Preposition; circā is probably a late formation after the analogy of extrā, suprā (§ 255. 3). Circiter probably contains the Comparative suffix -ter (§ 181). Cf. inter, propter, subter.
- **267.** Cis, citrā are from the root $c\bar{i}$ -, 'this.' On the final -s of $c\bar{i}$ s, see § 261. 2. $Citr\bar{a}$ has the Comparative suffix (§ 181). On the formation, see § 255. 3.
- **268.** Clam evidently contains the root of $c\bar{e}l\bar{o}$, 'conceal.' The formation is uncertain.
 - **269**. Com- (cum), co-. See § 58. b).
 - 270. Contrā. See § 255. 3.
 - 271. De may be an old Ablative formation for *ded.
- 272. Ergā, ergō are obscure in etymology and formation. They can have no connection with Greek (ϵ) $\xi \rho \gamma \sigma \nu$, work.
- 273. Ex, ec-, ef-, \overline{e} . See § 105. 2. On the final s of ex (= ee-s), see § 261. 2.
- **274.** Extrā is formed from ex by means of the Comparative suffix $ter\ddot{o}$ (§ 181). On the case-formation, see § 255. 3.

- 275. In is the unaccented form of Indo-European *en, Greek èv. The original form of the Preposition is seen in early Latin en-do. Cf. Greek èvδο-θι, èv-δον. Another form of endo is indu-(indi-) seen in indi-genus, ind-olēs, and in several early Latin words, e.g. indu-gredī.
 - 276. Infra. Cf. inferus, and see § 255. 3.
- 277. Inter, intrā are formed from in by means of the Comparative suffix -tero-; §§ 181; 255. 3.
- 278. Intus contains the same suffix as seen in dīvīnitus, funditus, etc.
- 279. Jūxtā is from the stem $j\bar{u}xt\bar{u}$, a Superlative of $j\bar{u}gis$. For the case-form, see § 255. 3.
- **280.** Ob is from an Indo-European *op-i, a Locative formation kindred with Greek $i\pi$ -i, to which it stands in Ablaut relation (§ 62). The form ob has developed from *op, exactly as ab from *ap (§ 261. 2); yet op- appears in op- $eri\overline{o}$, and is preserved in Oscan.
- 281. Per is for an Indo-European *peri (Locative). Cf. Greek $\pi \epsilon \rho i$.
- 282. Post, early Latin poste, apparently goes back to a Locative *posti.
- **283.** Prae, praeter. Prae is very likely a Locative from $pr\bar{a}$, an extension of pr- (weak form of per-). Cf. $pr\bar{o}(d)$ from $pr\bar{o}$ -. Praeter bears the same relation to prae as inter to in; subter to sub.
- **284.** Prō, prò-, por-. The relation between $pr\bar{o}$ and $pr\bar{o}$ (e.g. in $pr\bar{o}fugi\bar{o}$, $pr\bar{o}fic\bar{i}scor$, $pr\bar{o}teg\bar{o}$) is uncertain. Very likely $pr\bar{o}$ (earlier $pr\bar{o}d$, seen in $pr\bar{o}desse$, $pr\bar{o}d\bar{i}re$; § 109. 1) was an Ablative formation, while $pr\bar{o}$ (cf. Gr. $\pi\rho\dot{o}$) represents the simple stem. Por-, e.g. in por-tend \bar{o} , porrig \bar{o} , polliceor (for *por-liceor) may rep-

resent p_r , weak form of the root per- (§ 100. 2), with which all the above words are ultimately connected.

- 285. Prope, propter. Prope is for pro + pe. Cf. quip-pe. Propter bears the same relation to prope as inter to in, etc.
- **286.** Re-, red-. Re- is the earlier form; the d of red- is of uncertain origin.
- 287. Secundum is an Accusative from secundus, lit. 'following' (sequor).
- **288.** Se-, early Latin $s\bar{e}d$ -, preserved in $s\bar{e}diti\bar{o}$, may have been an Ablative formation; $s\bar{o}$ -, seen in $s\bar{o}$ -cors, $s\bar{o}$ -brius, may represent the Ablaut of $s\bar{e}$ -.
- **289.** Sub, subter.—The Indo-European form is *upo. Cf. Greek $\delta\pi\delta$ (with irregular rough breathing). The initial s is explained as containing a reduced form of ex, viz. 'ks, so that *(k)sup would represent the primitive formation. For the change of ρ to b, see § 261. 2. On subter, cf. inter.
- **290.** Super, suprā. Super goes back to an Indo-European *uper. Cf. Greek $\hat{v}\pi\acute{e}\rho$ (with irregular rough breathing). For the initial s, see § 289. Suprā sustains the same relation to super as intrā to inter.
- 291. Tenus is probably the Accusative of an obsolete tenus, -eris, lit. 'a stretch,' root ten-.
- 292. Trāns is probably the Present Participle of *trāre seen in intrāre, penetrāre, i.e. originally trāns flūmen mīlitēs dūxit meant he led his troops, crossing the river. On trā-, see § 105.2.
- 293. Uls, ultrā from root ol-, 'that' (cf. olle; § 195), are the pendants to cis, citrā.
 - 294. Versus, versum, etc. See § 258.

CHAPTER IX.

SYNTAX.1

THE CASES.

Names of the Cases.

295. The English word case comes from the Latin $c\bar{a}sus$, which was a translation of the Greek word $\pi\tau\hat{\omega}\sigma\iota s$. $\pi\tau\hat{\omega}\sigma\iota s$ (from $\pi\iota\pi\tau\omega$, fall), as a grammatical term, primarily denoted a 'change' or 'deviation,' and was accordingly first employed to denote the oblique cases, as being 'deviations' ($\pi\tau\hat{\omega}\sigma\epsilon\iota s$) from the Nominative. The Nominative itself, therefore, was not at the outset a $\pi\tau\hat{\omega}\sigma\iota s$, though it early came to bear this name.

296. The Greek names of the cases were:

ὀνομαστική (sc. πτῶσις), Nominative. γενική, Genitive. δοτική, Dative. αἰτιατική, Accusative. κλητική, Vocative.

¹ See especially Brugmann und Delbrück, Grundriss der Vergleichenden Grammatik, vol. iii. (Vergleichende Syntax, von Delbrück), Erster Theil. Strassburg, 1893. Dräger, Historische Syntax der Lateinischen Sprache, 2 vols. 2d edition. Leipzig, 1878, 1881. Kühner, Ausführliche Grammatik der Lateinischen Sprache, vol. ii. Hannover, 1878. Schmalz, in Müller's Handbuch der Klassischen Altertumswissenschaft, vol. ii. 2d edition. Nördlingen, 1889. Riemann, La Syntaxe Latine. 3d edition. Paris, 1894. Roby, Latin Grammar, vol. ii. 5th edition. London, 1888.

The Nominative was so called because it was the case employed for naming a substantive when it was simply cited as a word.

The significance of the term $\gamma \epsilon \nu \iota \kappa \dot{\gamma}$ is in dispute. Some have thought it meant 'the case of source or origin.' But the usual meaning of $\gamma \epsilon \nu \iota \kappa \dot{\alpha}$ is against this view. It probably meant 'the case of the genus,' or 'the generic case.' This view accords with the regular use of the Genitive to restrict the meaning of another word by denoting the class or $\gamma \dot{\epsilon} \nu \alpha \dot{\alpha}$ to which it applies, e.g. love of parents, 'fishers of men,' tons of earth.

The Dative was called $\delta o \tau \iota \kappa \dot{\eta}$, 'the case of giving,' though this is simply one prominent function of the case.

In calling the Accusative alrianish, the Greeks intended to designate this case as the 'case of effect,' i.e. of the thing caused (alría). Here again the name designated but imperfectly the functions of the case. For the Accusative indicates also the person or thing affected, to say nothing of other uses.

κλητική means 'calling case' or 'case of address.'

297. The Romans in devising grammatical terms for their own language simply translated these Greek names. ονομαστική became Nominativus (sc. casus). In translating yeviký by Genetivus the Roman grammarians falsely interpreted the case as that of source, or origin, misled doubtless by the frequent use of the Greek Genitive in that function. δοτική became Datīvus. αἰτιατική was falsely rendered Accūsātīvus, as though αἰτιατική were derived from airiáoμαι, accuse. κλητική became Vocātīvus. The Greek had no Ablative, and for this case the Romans were therefore obliged to coin a new term; they named it Ablatīvus, 'the case of taking away.' This designation was fairly accurate for certain uses of the case, viz. those of the true Ablative; but it ignored the Instrumental and Locative uses of the case (§ 331). uncertain just when and by whom these Latin names were introduced. They had become established as current terms by Quintilian's time (90 A.D.).

Review of Case-Theories.

- 298. Since the beginning of the present century, there has been much discussion concerning the original force of the cases both individually and collectively.
- 299. The Localistic Theory. The chief representative of this was Hartung, who set forth his views in 1831 in a work Ueber die Casus, ihre Bildung und Bedeutung. Hartung started with the assumption (largely a correct one) that in language the development is from the concrete to the abstract, — that words at the outset indicated definite sense concepts, which later came to be used in transferred meanings. Applying this principle to the cases, he assumed that in Greek and Latin there had been (in addition to the Nominative and Vocative) three cases, one to designate each of the three definite local relations, from, in, and to. Applying this principle first to Greek he explained the Genitive as the from-case, the Dative as the in-case, the Accusative as the to-case. For Latin, substantially the same explanation was given, except that the Dative of the Greek has in Latin, according to Hartung, been differentiated into two cases, Dative and Ablative, of which the latter has entirely absorbed the in-function, while the Dative has developed new meanings.

Hartung's theory has been styled 'thorough-going' Localism. It asserted that the original Indo-European case-system (apart from Nominative and Vocative) had originally been limited to three cases, which expressed the three natural space relations. Wherever in the individual languages more cases appeared (as in Latin or Sanskrit), these were held to be differentiations ('Zersplitterungen') of the original three. Whatever may be true of the meaning of individual cases, comparative grammar conclusively proves that Localism in the form in which Hartung held it is absolutely untenable. A case-system of at least six clearly distinguished oblique cases must have existed in the Indo-European parent-speech.

- 300. The Logical Theory. Michelsen, in his Casuslehre der lateinischen Sprache vom causal-localen Standpuncte aus, published in 1843, endeavored to apply logical categories to the explanation of the cases. According to him two principles are fundamental: 1) Causality (including cause and effect). 2) Finality. Hence in every sentence, he holds, we must have a cause, an effect, and a purpose. The Nominative he regarded as the case expressing the cause, the Accusative the case of the effect, the Dative as the case of finality or purpose. The Genitive and Ablative were also given special treatment, though these cases were regarded as not essential to logical completeness. But Michelsen's theory is false in principle. Language is not founded on logic, and any attempt to explain forms of speech as primarily identical with logical categories must always be fruitless.
- 301. The Grammatical Theory.—In 1845 appeared Rumpel's Casuslehre in besonderer Beziehung auf die griechische Sprache. This book was a protest against the Localism of Hartung on the one hand and the logical theory of Michelsen on the other. Rumpel asserted the purely grammatical character of the cases. The Nominative he defined as the case of the Subject, the Accusative as the case used to complete the meaning of the verb, the Genitive as the adnominal case or case used to complete the meaning of a noun, while the Dative was used to modify the meaning of the sentence as a whole. Where the Genitive limited a verb, it was explained as denoting an internal relation as opposed to an external relation, such as that denoted by the Accusative. As Rumpel concerned himself only with Greek, he propounded no theory of the Ablative.
- 302. Subsequent Views. Rumpel's theory shows much better method than either Hartung's or Michelsen's. Yet the grammatical theory of the cases is not universally true. Discussion since Rumpel's day has shown that while some of the cases are

undoubtedly grammatical in their origin, others were just as certainly local. To the Grammatical cases belong with certainty the Nominative and the Genitive, the former as the case of the subject, the latter as the adnominal case. To the local cases belong with certainty the Ablative, as the from-case, the Locative, as the in-case, and the Instrumental, as the case denoting association with. Diversity of opinion still exists as to the Dative and to some slight extent as regards the Accusative. If we regard the Dative as originally the case of direction, it is a local case; if we take it as originally used to modify the sentence as a whole, it is a grammatical case. The Accusative is usually regarded as simply completing the meaning of the verb, and is therefore classified as a grammatical case; but there is some warrant for considering it as originally denoting the goal of motion, in which case it would be local. See § 311.

THE ACCUSATIVE.1

303. The distinction between the Accusative of the Person or Thing Affected (Gr. § 175) on the one hand and the Accusative of the Result Produced (Gr. § 176) on the other, is one of fundamental importance. Other designations are often employed to distinguish the two types. Thus the Accusative of the Person or Thing Affected is called External Object, the Accusative of Result Produced the Internal Object. But these designations are likely to prove too philosophical for elementary pupils. German scholars employ also the designations 'Akkusativ des Affekts' and 'Akkusativ des Effekts,' terms which might be advantageously imitated in English, if our language only had the noun Affect. When the Greek philosophers gave the name alτιατική to the Accusative, they had in mind only the second of the two uses of the Accusative now under consideration, viz. the Accusative of the Result Produced or, as they designated it, of the Thing Caused ('Internal

¹ For the original force of the Accusative, see § 311.



Object, 'Effect'). The Romans, in transferring the Greek name of the case to Latin, should have rendered it by some such word as *Causātīvus* (a designation actually employed by Priscian) or *Effectīvus*. Either of these would, like the Greek original, have been a defective name (cf. § 296), but it would have been accurate as far as it went.

304. The Accusative with Passives used as Middles. — The treatment of the Accusative after Passive Verbs in $Gr. \S 175. 2. d$) is based on the elaborate discussions of Schröder, Der Accusativ nach Passiven Verben in der Lateinischen Dichtersprache, Grossglogau, 1870; Engelhardt, Passive Verba mit dem Accusativ, Bromberg, 1879; and the treatment of Kühner in his Ausführliche Lateinische Grammatik, ii. § 71. b). The explanation of the Accusative as Synecdochical (cf. Gr. § 180), which is sometimes given for this construction, is not adequate. It might explain such phrases as cinctus tempora hederā, but is irrational for galeam induitur, nōdō sinūs collēcta, laevō suspēnsī loculōs lacertō, and many others. On the other hand, the interpretation of the Passive in such instances as a Middle, and the Accusative as the Direct Object, furnishes a satisfactory explanation of all phrases of this type.

Sometimes by an extension of usage the Middle is employed to indicate that the subject lets some action be consummated upon himself, or has it done. Cf. English he had his hair cut. An illustration of this is Vergil, Aen. ii. 273 per pedēs trājectus lora, 'having had thongs drawn through his feet.' For a few instances in which a Synecdochical Accusative occurs with Passive verbs, see § 307.

305. Accusative of Result Produced. — The different constructions grouped together under Gr. § 176. 1-5, are often referred to the Cognate Accusative as the original from which they have all developed. The Cognate Accusative, however, is so restricted

in its scope that it seems better to regard it as a subdivision of a larger category rather than as the basis of such a category. Cf. Brugmann, Griechische Grammatik², § 178. 2, who classifies τύπτειν ελκος (strike a wound, i.e. produce a wound by striking) and νικῶν νίκην, win a victory, as parallel subdivisions of the general category of the Accusative with Verbs of producing.

306. Accusative of Person Affected and of Result Produced Dependent upon the Same Verb (Gr. § 178). — The true character of this construction is best seen in phrases where the Accusative of Result is a Neuter Pronoun or Adjective, e.g. te haec rogo, id me doces, the essential point being that the Latin was able not only to say id doces (Acc. of Result) and me doces (Acc. of Person Affected), but to combine the two constructions in a single phrase. It is a misconception to regard the Accusative of Result in such sentences as any less the Direct Object than the Accusative of the Person Affected. Each of the two Accusatives is a Direct Object equally with the other. There is no essential difference between the construction of haec in haec me rogas and the construction of haec in haec rogās. In many instances the Accusative of Result with verbs of asking, teaching, etc., is clearly of secondary origin, e.g. te sententiam rogo, after te hoc rogo; te celavi sermonem after te id celavi.

307. The Synecdochical or Greek Accusative (Gr. § 180).— There can be little doubt that this construction is a Grecism. Cf. Quintilian, ix. 3. 17. Some have claimed it as a genuine Latin idiom, but its almost total restriction to the poets of the imperial age and to the prose writers who imitate them is against any such theory. The names 'Accusative of Specification' and 'Accusative of Respect' are sometimes used to designate this construction.

With Passive verbs the Accusative usually belongs under Gr. § 175. 2. d), but in some twenty instances in the Augustan poets and in about twice that number in Lucan, Silius, Statius, and

Valerius Flaccus, we must recognize the Synecdochical Accusative. A typical instance is, Vergil, Aen. ii. 57, manūs juvenem post terga revinctum, 'tied as to his hands.'

- 308. Accusative in Exclamations. This construction is apparently the result of ellipsis. Just what verb is to be supplied in thought in particular instances is not always clear, nor is it material that it should be determined.
- 309. The Accusative as Subject of the Infinitive. The Accusative as Subject of the Infinitive is an outgrowth of the use of the Accusative as Direct Object. The history of the construction may be illustrated as follows: In an expression like jussī eum abīre, eum was originally the object of jussī, while the Infinitive was a noun in the Locative (§ 243), the force of the entire phrase being: I ordered him to a going (§ 351). But in course of time the eum abīre came to be felt as a whole and as sustaining an object relation to the verb, a conception which led to such expressions as jussit puerōs necārī, where puerōs could never have been the object of jussit. When once the construction of the Accusative with the Infinitive became established, its extension was rapid. Expressions like jussit puerōs necārī easily led to dīxī puerōs necātōs esse, whence puerī necātī esse dīcēbantur and other types of Infinitive usage.
- 310. Id genus, muliebre secus, etc.— 1. Id genus is clearly appositional in origin, as indicated by the fact that it regularly occurs only in combination with a Nominative or Accusative, i.e. not virōrum id genus, but usually virī id genus, virōs id genus, etc.
- 2. Muliebre secus, virīle secus, while doubtless of the same origin as id genus, have nevertheless advanced a stage beyond it in actual use. We find not only līberī muliebre secus, 'children of the female sex,' lit. 'children, the female sex' (of children), but also līberōrum (līberīs) muliebre secus.
 - 3. Meam vicem, tuam vicem, etc. The appositional origin of

this phrase seems to be indicated by such early Latin usages as Plautus, Mostellaria ii. 1. 8 quī hodiē sēsē excruciārī meam vicem possit patī, 'who can let himself be tortured, as my substitute'; Captivi 697 ut eum remittat nostrum amborum vicem, 'to release him in return for us two,' lit. 'as an exchange for us two.'

- 4. Māgnam partem, māximam partem. The appositional origin of these phrases is less certain, yet expressions like Livy, v. 14 and ix. 37. 9 māximam partem ad arma trepidantēs caedēs oppressit, seem to point in that direction.
- 311. Original Force of the Accusative Case. Rumpel in his Casuslehre, published in 1845 (cf. § 301), contended that the Accusative served simply as the complement of the verb, and that all the varieties of meaning, such as limit of motion, duration of time, direct object, etc., are but varieties of this primary function. Rumpel accordingly regarded the Accusative as a grammatical case, and this view has been maintained by most subsequent scholars. It is advocated to-day by all the leading authorities, e.g. Delbrück, Brugmann, Hübschmann, Holzweissig, Gädicke, and others. This theory, it must be admitted, is both simple and rational. Yet there have always been some scholars who have recognized the goal-notion as representing the original force of the Accusative. While it is impossible to prove the truth of this latter theory, yet the arguments in its favor deserve consideration. They are the following:
- 1. The antecedent probability of the existence of a case denoting to a place, person, or thing, is very great. It is admitted that the parent-speech had an *in*-case (the Locative) and a *from*-case (the Ablative), so that a to-case might naturally be expected as the complement of these.
- 2. There are advantages in starting with a concrete, tangible meaning for the Accusative. Language undeniably develops from the concrete to the abstract.
 - 3. The goal-notion is shown by the testimony of those Indo-

European languages whose literature reaches furthest back, to have been an extremely primitive force of this case. Thus Sanskrit and Homeric Greek exhibit the goal-meaning of the Accusative, while the vestiges of it in Latin indicate that in prehistoric times it had been more frequent. Thus the use of town names, and of domum, domōs, rūs, to denote the goal of motion, and the occurrence of such expressions as exsequiās īre, īnfitās īre, pessum dare, vēnum dare, point to a freer use of the same kind in early times. The Supine in -um also shows this primitive force. It is noteworthy that in post-Homeric Greek this goal-use of the Accusative had become obsolete. Post-Homeric Greek stands upon the same ground as Latin in this respect. In both of these languages the practical disappearance of the goal-notion in historical times would seem to indicate that as other uses developed the original function gradually passed away.

4. The other uses of the Accusative may all be satisfactorily derived from the goal-use as the original one. As the first and most obvious developments must be considered the Accusative of Extent of Space and of Duration of Time. Thus viginti milia processit would originally have meant 'he advanced to the limit of twenty miles,' whence arose secondarily the notion of extent. Similarly viginfi annos vixit would have meant originally 'he lived to the limit of twenty years,' whence secondarily 'he lived throughout twenty years.' In the case of the Direct Object the Accusative may also have originally designated the limit of the action of the verb. Thus aedes struxit would originally have meant 'he performed an act of building, the goal of which was a house.' Similarly video hominem, 'I perform an act of seeing, the goal of which is a man.' Cf. the similar idiom prevalent in certain Romance languages, e.g. Spanish yo veo al hombre, lit. 'I see, to the man' = 'I see the man.' The so-called Accusative of Specification, which, so far as it appears in Latin, is apparently a Grecism (§ 307), would be the least obvious development of the goalnotion. Yet expressions like umeros similis deo, lit. 'like a god

as to the shoulders,' may be explained as originally meaning 'looking to the shoulders,' 'as regards the shoulders,' i.e. the shoulders are conceived as the thought limit to which the statement is referred.

THE DATIVE.

- 312. The Dative probably originally designated motion towards, motion in the direction of. It was accordingly a localistic case. Some, however, as Delbrück, regard it as a grammatical case, and think that originally it was a mere sentence modifier, very much like the so-called Dative of Reference. But it is much more difficult to develop the notion of direction from the force of the Dative as a sentence modifier than vice versa; Brugmann (Griechische Grammatik, § 175) expresses the opinion that the notion of direction in the Dative is as old as the parent-speech; if so, it seems simpler to assume this concreter meaning as the original one. In that case the poetical construction of the Dative to denote direction of motion (Gr. § 193) would represent the original meaning of the case.
- 313. Dative of Indirect Object. The Dative of Indirect Object is a very obvious development of the notion of direction, just assumed as the original meaning of the Dative case. Thus tibi hōc dīcō, 'I tell you this,' would originally have meant 'I tell this in your direction'; so tibi ignōscō, 'I pardon you'; ruīna nōbīs impendet, 'ruin threatens us.'
- 314. Indirect Object with Verbs signifying 'Favor,' 'Help,' etc.—
 It is a common conception that the Latin is peculiar in construing many verbs of these meanings with the Dative; but this impression is erroneous, and largely due to the loss of inflections in English, whereby the original distinction between the Anglo-Saxon Dative and Accusative has become obliterated, so that the English 'Objective' is commonly felt as an Accusative.

As a matter of fact many verbs of the category under consideration were intransitive in Anglo-Saxon and in Teutonic generally, and accordingly governed the Dative case. Modern German gives clear illustration of this. Cf. e.g. ich glaube Ihnen, ich verzeihe Ihnen, ich traue Ihnen, ich helfe Ihnen. Latin, therefore, does not differ from English and the other Teutonic languages in taking the Dative with these verbs; on the other hand there is a striking agreement, when we come to examine the matter from the historical point of view.

- 315. The Indirect Object with Compound Verbs. It is a misconception to suppose that the mere fact of composition with certain prepositions was the occasion of the employment of the Dative case. Prepositions when prefixed to neuter verbs often essentially modify the previous character of the verb. Sometimes they make the verb transitive (i.e. the verb becomes transitive), and it then governs the Accusative (e.g. intre magistratum. Cf. Gr. 175. 2. a). More frequently a neuter verb, when compounded with a preposition, becomes only so far modified in meaning as to admit an indirect object, not a direct one, e.g. perīculīs incurrit. But the use of the Dative should be referred not to the fact of composition, but to the meaning of the verb. Least of all should the Dative be regarded as depending upon the preposition, an error often propagated in the minds of elementary pupils.
- 316. The Dative of Reference is an outgrowth of the original notion of direction belonging to the Dative. It is a somewhat less obvious development than the Dative of Indirect Object, representing as it does a somewhat weaker relation. Thus in a sentence like nobis hostes in conspectum venerant, the Dative represents the direction of the thought as a whole rather than of the action indicated by the verb. The name 'Dative of Interest' sometimes applied to this construction is somewhat narrower in

scope than 'Dative of Reference,' and hence is less satisfactory. The subdivision of this construction into 'Dative of Advantage' and 'Dative of Disadvantage' is quite useless. These designations obscure the real character of the construction, calling attention, as they do, to what is merely accidental. A division of the Accusative of Direct Object into 'Accusative of Advantage' and 'Accusative of Disadvantage' would be equally justified.

- 317. The Ethical Dative. This is simply a special phase of the Dative of Reference, and is entitled to recognition as a separate category only because it represents the Dative in its most attenuated force, often, in fact, quite untranslatable. It is confined to the Personal Pronouns.
- 318. Dative of Agency; Dative of Possession.—These are both developments of the Dative of Reference. Thus haec mihi agenda sunt originally meant 'this is to be done and it is with reference me that this is true,' i.e. 'I must do this.' Similarly $n\bar{o}b\bar{i}s$ sunt $agr\bar{i}$ originally meant 'there are lands, and it is of us that this is true,' i.e. 'we have lands.'
- 319. Dative of Purpose.—This, like the Dative of Indirect Object, is a perfectly obvious development of the original notion of direction belonging to the Dative. Thus recepture canere, 'to sound the signal for a retreat,' was originally 'to sound the signal in the direction of a retreat'; rei publicae cladi sunt similarly meant 'they are in the direction of damage to the state.'

THE GENITIVE.

320. The Genitive is best regarded as primarily an adnominal case, *i.e.* as originally used with nouns to define their meaning more closely. It is therefore a grammatical, as opposed to a local, case. The use of the Genitive with verbs must be regarded as secondary, and as developed from its use with nouns by some association or analogy.

- 321. Genitive with Nouns. The special kind of closer determination expressed by the Genitive, depends upon the context. There was no one type from which the others developed, but all of the varieties enumerated in Gr. § 195 (excepting the Genitive of Quality) are equally primitive. Most of these call for no special comment, but the Objective Genitive is noteworthy as exhibiting at times a wider extension of application than at first belonged to it. Theoretically the Objective Genitive is used only with verbal nouns whose corresponding verb governs the Accusative. Thus amor patris corresponds to amare patrem, metus deorum to metuere deos, etc. But by an extension of usage we frequently find the Genitive used with nouns derived from verbs which govern other cases, and even from verbs which admit no case construction whatever. Typical examples are: consuetudo hominum, 'intercourse with men'; excessus vitae, 'departure from life'; īra praedae amissae, 'anger on account of the loss of the booty'; argenti orātio, 'talk about the money.' These relations, however, are usually more accurately expressed by means of prepositions.
- 322. Genitive of Quality. This seems to have been of secondary origin and to have developed from the Subjective Genitive. Thus homo magnae virtuis was probably originally 'Virtue's man.' In conformity with this origin, the Genitive of Quality regularly denotes a permanent quality, as opposed to the Ablative of Quality, which was primarily employed to designate qualities which were more or less transitory. See § 345.
- **323.** Genitive with Adjectives. This construction must be regarded as equally primitive with that of the Genitive with nouns. *Cupidus laudis*, for example, is just as original a construction as *cupiditās laudis*.

As regards the construction with similis, many fine-spun theories have been propounded to account for the difference between

similis with the Genitive and similis with the Dative. The difference, however, is probably merely one of chronology and not of meaning. In the earliest Latin we find similis construed only with the Genitive. This is Plautus's unvarying usage. Later the use of the Dative begins to creep in, doubtless after the analogy of $p\bar{a}r$ and similar words construed with the Dative, and as time goes on the Dative gains the supremacy more and more, until in Silver Latin the Genitive is comparatively rare.

- 324. Genitive with Verbs. If the Genitive was primarily an adnominal case, its use with verbs must be of secondary origin, and is due either to some analogy whereby the verb adopts the construction of a noun of kindred meaning, or else to the ellipsis of a governing word.
- 325. Genitive with Meminī, Reminīscor, Oblīvīscor. With verbs of remembering the use of the Genitive apparently comes from associating the verb with memor. Thus meminī was felt as memor sum. Oblīvīscor followed the analogy of its opposite, meminī. Cf. English differ with after the analogy of agree with.
- **326.** Genitive with Admoneo, etc. Here the verb of reminding was probably felt as equivalent to aliquem memorem reddere, and was construed with the Genitive on this principle.
- 327. With Verbs of Judicial Action the Genitive is plausibly explained as resulting from an ellipsis of the governing word, crīmine, jūdiciō, nōmine. Thus Verrem avāritiae coarguit is to be regarded as standing for Verrem avāritiae crīmine coarguit; 'he convicts Verres on the charge of avarice.' Occasionally crīmine was expressed, e.g. Tacitus, Annals, vi. 14. 2 cecidēre conjūrātiōnis crīmine; iii. 44. 8 mājestātis crīmine reum.
- 328. Genitive with Pudet, Paenitet, etc. The Genitive here is held to depend upon the noun notion implied in the verb. Thus pudet suggests pudor; paenitet, paenitentia; miseret, misericordia, etc.

- 329. Interest and Refert. The Genitive here is probably the Subjective Genitive used predicatively, i.e. patris interest rem familiarem curare is quite analogous to patris est rem familiarem curare. For the Ablative Singular Feminine of the Possessive with refert and interest, see § 349. 3.
- **330.** Genitive with Other Verbs. With verbs of plenty and want, e.g. compleo, impleo, indigeo, the Genitive, where used, is employed after the analogy of its use with adjectives of plenty and want; thus compleo after plenus; indigeo after egenus, etc. But with most verbs of this category the Ablative is the regular construction. Potior when construed with the Genitive follows the analogy of potens, 'master of.'

THE ABLATIVE.

- **331.** The Ablative is a so-called syncretistic case, *i.e.* a case resulting from the fusion of more than one original case. The Ablative represents three original Indo-European cases, *viz.* the true Ablative or *from*-case, the Instrumental or *with*-case, and the Locative or *in*-case. Evidences of the fusion referred to are found both in the forms and in the functions of the so-called Ablative.
- a) Forms: Only a portion of the forms designated as Ablative are historically such. Thus in \bar{a} -stems the Ablative Singular is a true Ablative (e.g. port \bar{a} , for port $\bar{a}d$; § 118). In the Plural of \bar{a} -stems the so-called Ablative is probably an Instrumental, possibly a Locative (§ 122). The same is true of \bar{o} -stems as of \bar{a} -stems. In Consonant stems the Ablative Singular in -e (e.g. milite) is either an Instrumental or a Locative (§ 141), while the Plural ending -ibus is a true Ablative. In the -i-, -ii-, and - \bar{e} -stems both the Ablative Singular and the Ablative Plural are true Ablatives.
- b) Functions: The triple function of the so-called Ablative also points clearly to a triple origin of the case. Thus we find from-uses, with-uses, and in-uses (the last much rarer than the

others) side by side. Notions so radically distinct could hardly have developed from a single original case.

By the Romans, of course, the Ablative was felt as a single case. They were totally ignorant of its syncretistic origin, although they recognized its great diversity of function.

- 332. Causes of Syncretism in the Latin Ablative.—The causes leading to syncretism in the Ablative were of twofold nature:
- a) In the first place certain Ablative, Locative, and Instrumental formations, originally distinct, came to be identical in form. Thus in consonant stems the original Locative ended in -i, the Instrumental in -a. But by phonetic laws -i and -a both became -i. Thus an original *milit-i and an original *milit-i both became milit-i. Similarly in the Ablative Plural of \bar{a} and \bar{o} -stems -is (for $*-\bar{a}is$, $*-\bar{o}is$; § 122) may possibly represent both a Locative and an Instrumental formation. So probably some other formations.
- b) In the second place the Locative, Ablative, and Instrumental cases, in spite of their radical differences of meaning, naturally possessed certain points of contact. Thus aqua lavare might have meant originally either 'to wash with water' or 'to wash in water,' i.e. might be expressed either by the Instrumental or the Locative. Similarly equo vehī might mean 'to be borne on a horse' or 'by a horse'; onus umero sustinet, 'he bears the load on his shoulder' or 'with his shoulder'; carris veniunt, 'they come with carts' or 'on carts,' etc. These examples all show points of contact between the Locative and Instrumental. The Ablative and Instrumental also have certain points of contact. Thus *īrā ārdēre* might mean either 'to burn with anger' or 'from anger'; lacte vivunt might mean either 'they live from milk' or 'by milk,' etc. Points of contact between Locative and Ablative are naturally much less frequent, yet such English expressions as 'to receive at the hands of' and 'from the hands of,' show that even here contact was possible.

Ablative, Instrumental, and Locative, therefore, to a certain extent occupied common ground in the field of thought, and this circumstance, coupled with certain outward resemblances in form, ultimately led in Latin to a complete fusion of the three and to the establishment of a single syncretistic case, — the Ablative.

Genuine Ablative Uses.

- 333. The true Ablative designated dissociation or the point of departure. When the dissociation is external, we call the construction Ablative of Separation; when the dissociation is internal, we call it Ablative of Source, a construction which in prose is confined to narrow limits. The Ablative of Agency is also a development of the true Ablative, the agent being conceived as the source from which the action emanates; e.g. in \(\bar{a}\) Caesare acc\(\bar{u}\)s\(\bar{a}\)ture tus est the action was primarily conceived as emanating from Caesar as its source.
- **334.** Ablative of Comparison. This construction also reveals the original conception of *point of departure*. Thus *melle dulcior* primarily meant 'sweeter, reckoning from honey as the standard,' and so in similar expressions. An examination of Cicero's orations shows that in this writer the Ablative of Comparison is mainly restricted to negative sentences, to interrogative sentences implying a negative, and to a few stock phrases such as *lūce clārius*, *lātius opīnionē*, *etc*.

When plūs, minus, longius, and amplius are used as the equivalents of plūs quam, minus quam, etc., the plūs, minus, etc., were probably originally appositional. Thus amplius vīgintī urbēs incenduntur originally meant 'twenty cities, (aye) more were fired.' This explanation, of course, involves the assumption that originally a different order of the words existed in sentences of this type, e.g. vīgintī urbēs, amplius, incenduntur, and this assumption is borne out by the repeated occurrence of this order, e.g. Tac. Ann. xii. 43 quīndecim diērum alimenta, non amplius, 'food

for fifteen days, not more'; Livy xxix. 32. 5 cum quinquaginta, haud amplius, equitibus, 'with fifty horsemen, no more.'

Instrumental Uses of the Ablative.

- **335.** The Instrumental was primarily the case of association or with-case.
- 336. Ablative of Accompaniment. This is logically one of the first and most obvious developments of the sociative idea. The construction is not frequent, however, being confined mainly to military expressions. Gr. 222. 1.
- 337. Ablative of Association. Besides the idea of accompaniment (which strictly applies only to persons in connection with a verb of motion) the Ablative also sometimes denotes association. This construction was never common in Latin, yet it should be recognized in a limited set of expressions; thus with jungere, conjungere, miscēre, mūtāre, permūtāre, assuētus, e.g. libīdō scelere jūncta, 'lust joined with crime'; mella vīnō miscēre, 'to mix honey with wine'; bellum agricultūrā permūtant, 'they exchange war for farming'; assuētus labōre, 'accustomed to toil' (lit. 'familiarized with toil'). In all of these expressions and in some others of less frequent occurrence, it seems better to recognize the primitive sociative force of the Instrumental, rather than the Ablative of Means, as is done in Gr. § 218. 5; 7.
- 338. Ablative of Attendant Circumstance (Delbrück's 'Instrumentalis der Begleitenden Umstände'; Vergleichende Syntax, § 105).—This construction also is a direct outgrowth of the sociative idea inherent in the Instrumental. Thus dat sonitū māgnō strāgem means 'occasions destruction in connection with a loud crashing'; nēmō mea fūnera flētū faxit, 'let no one celebrate my obsequies with weeping'; exstinguitur ingentī lūctū, 'he dies under circumstances of great sorrow,' etc.

- 339. The Ablative of Manner is another obvious development of the sociative idea. Thus in māgnā gravitāte loquitur, 'he speaks with great impressiveness,' the 'impressiveness' was primarily conceived as an accompanying feature of the speaking. 'Manner' differs from 'Attendant Circumstance' in that it is regularly restricted to abstract words, e.g. celeritāte, virtūte, dīgnitāte, etc.
- 340. Ablative of Accordance. The construction treated under Ablative of Manner in Gr. § 220. 3, viz. suīs mōribus, meā sententiā, etc., seems to be closely connected both with Manner on the one hand and Attendant Circumstance on the other. The type is so definite and pronounced that it deserves clear recognition in our Latin teaching. Another excellent example of the construction is seen in Cic. de Sen. 3, parēs autem vetere prōverbiō cum paribus facillimē congregantur, 'according to the old proverb, "birds of a feather flock together."'
- **341.** Ablative of Means.— The notion of Means is an outgrowth of the idea of Association. Thus, hostem telo percussit is primarily 'he smote his foe (in connection) with a spear.' Out of this sociative idea the notion of means or instrument developed secondarily. Yet there are few instances of the Ablative of Means in which traces of the sociative notion are not apparent, and in some cases this idea is very prominent, e.g. pilā lūdere, 'to play (with a) ball'; deōs precibus adōrāre, 'to worship the gods with prayers.'
- 1. With utor, fruor, fungor, potior, vescor, the Ablative of Means is a natural result of the Middle, i.e. reflexive, use of these verbs, 'benefit one's self,' enjoy one's self,' etc.
- 2. With opus est the Ablative is a secondary construction after the analogy of $\bar{u}sus$ est with the Ablative. In $\bar{u}sus$ est aliqua $r\bar{e}$, 'there is need of something,' the Ablative was originally one of Means, lit. 'there is service by means of something.' From the notion of use the notion of need arose secondarily. Cf. German ich brauche etwas, 'I need something,' as an outgrowth of the

earlier meaning, 'I use something.' Besides the use of ūsus est with the Ablative, we find usus used predicatively, e.g. hoc usus est, 'this is necessary.' Now in the case of opus, the predicate construction was probably the earlier; opus is best taken as the Genitive of ops, 'help, service.' The formation would then be a relic of Genitives of the type of nominus, necessus, etc. (§ 138). At the outset hoc opus est meant 'this is of service,' secondarily 'this is necessary.' Early Latin exhibits many instances of this predicative use of opus in its original meaning, 'of service,' and the same force is noticeable at times in Cicero (e.g. de Or. ii. 296), Livy (e.g. xliii. 19. 4), and later writers. The construction opus est aliqua re seems to be historically later than the predicate construction, and to have developed after the analogy of ūsus est aliqua re. It is in view of this theory of the origin of the construction that it has been classed in the Gr. as a subdivision of the Ablative of Means.

- 3. With contineri, consistere, constare, consist of, be composed of, the Ablative was probably originally one of Means. Such is the view of Ebrard, de Ablativi, Locativi, Instrumentalis usu, p. 645. Kühner and Roby also give this explanation for constare and consistere; contineri they explain as a Locative use. But all three words originally had the same meaning, 'hold together, be held together,' and it seems unnecessary to adopt different explanations for the separate verbs. Some scholars regard the Ablative with all three verbs as a true Ablative usage. This view is based upon the occurrence of ex with the Ablative with constare. But prepositions are a very uncertain guide in such matters. Often more than one case relation is possible with the same verb; and often a verb in its developed meaning takes a different construction from that which it originally had. See Delbrück, Vergleichende Syntax, p. 230.
- 4. Quid hoc homine facias; quid me fiet? Delbrück in his Ablativus, Localis, Instrumentalis, p. 17 (published in 1867), explained the case in expressions of this type as a true Ablative

Ebrard's collections for early Latin, however, showed that the construction was rather Instrumental in origin, and Delbrück now (*Vergleichende Syntax*, p. 248) adopts this view.

- 5. Ablative of the Way by which. This construction seems to be one of considerable antiquity, and deserves recognition as an independent type of the Instrumental. It appears not only in Latin, but in several other Indo-European languages. Illustrations for Latin are: ut jugīs Octogesam pervenīret, 'that he might reach Octogesa by way of the mountains'; porfīs ērumpunt; frūmentum quod flūmine Ararī subvexerat.
- 342. Ablative of Cause. Cause is sometimes referred to the true Ablative for its origin. In accordance with this theory $\bar{\imath}r\bar{\imath}$ ardere meant originally 'to burn from anger.' The Sanskrit often employs the Ablative in this way. On the other hand an Instrumental origin is equally conceivable. Cf. such English expressions as burn with anger, howl with pain, leap with joy, green with envy; the Sanskrit employs the Instrumental as well as the Ablative to denote this relation. Other Indo-European languages also use the Instrumental to denote Cause. While it is impossible to prove that Cause has developed exclusively from the Instrumental conception, yet it is likely that this case has at least had the greater share in propagating the construction; such is now the opinion of Delbrück (Vergleichende Syntax, § 126). Cf. also Kühner, Ausführliche Grammatik, ii. p. 291.
- 343. Ablative of Degree of Difference. This seems an outgrowth of the Ablative of Means; i.e. \(\bar{u}n\bar{o}\) die longi\(\overline{o}\) rem m\(\overline{e}\) seems an outgrowth of the Ablative of Means; i.e. \(\bar{u}n\bar{o}\) die longi\(\overline{o}\) rem m\(\overline{e}\) seems an outgrowth of the Ablative of Means; i.e. \(\bar{u}n\bar{o}\) die longi\(\overline{o}\) rem m\(\overline{e}\) seems an outgrowth of the Ablative of Means; i.e. \(\overline{u}n\bar{o}\) die longi\(\overline{o}\) rem m\(\overline{e}\) neans of one day,' and so on.
- 344. Ablative of Price. Price was in its origin a development of the Means notion. At the outset, the construction must have been confined to verbs of buying, e.g. puellam vīgintī minīs ēmit, 'he bought the girl by means of twenty minae.' With verbs

of selling the price was not strictly the means of selling; but after the analogy of verbs of buying, such verbs early came to take the Ablative construction. A still further extension of the construction is seen in its application to verbs of costing, being worth, etc., and also to the adjectives vilis, 'cheap'; carus, 'dear,' 'too dear,' e.g. HS sex milibus constat, 'it costs 6000 sesterces'; asse carum, 'dear at a farthing.'

The use of tanti, quanti, plūris, minoris with verbs of buying and selling is the result of a transference of the Genitive of Value (Gr. § 203. 3) from verbs of valuing, estimating, etc., to verbs of buying and selling. Such a transition is psychologically easy. Cf. our English I wouldn't give a penny for that (a phrase of buying) in the sense of I don't value that at a penny.

345. The Ablative of Quality is an obvious outgrowth of the sociative force of the Instrumental case. Thus in a sentence like serpens immānī corpore incēdit, the original idea was 'the serpent moves on with its huge body,' as though the body were a distinct accompaniment of the serpent. But in course of time the Ablative in such cases came to be felt as a modifier of the noun. In this way such expressions as acerba tuēns immānī corpore serpēns became possible. Here the phrase immānī corpore can be conceived only as an Ablative of Quality, limiting serpēns; it cannot be associated with the verb as in the first example.

In conformity with its origin, the Ablative of Quality primarily denotes more or less transitory qualities. Qualities which are the mere outward accompaniment of an action are naturally not permanent. The observation sometimes made that the Genitive denotes internal qualities, whereas the Ablative primarily denotes external ones, is not sufficiently exact. In the phrase hortātur ut bonō animō sint, 'he urges them to be of good courage,' the quality is internal; yet the Genitive could not here be used; for while the quality is internal, it is transitory. On the other hand, 'a man of high purpose' is in Latin vir māgnī animī, since a per-

manent and not a passing quality is intended. By an extension of usage the Ablative is sometimes employed, where ambiguity would not result, to indicate permanent characteristics; but the Genitive is not used to denote temporary qualities. Thus physical and bodily characteristics, as belonging to this latter class, are regularly designated by the Ablative.

346. Ablative of Specification.—This seems to be a development of the sociative force of the Instrumental. Thus Helvētiī virtūte praecēdunt meant originally 'the Helvetii with their valor are superior'; so pede claudus, 'lame with his foot.' The Means conception may also have assisted in the propagation of the construction.

347. Ablative Absolute.—The Ablative Absolute construction is an outgrowth of the sociative force of the Instrumental. Thus in Plaut. Trin. Prol. 13 rem paternam mē adjūtrīce perdidit, the sense is: 'he lost his property (in connection) with me helping him'; so frequently mē jūdice, 'with me as judge'; fē praesente, 'with you present.' Cf. further scissā veste, passīs capillīs, 'with clothes torn, and hair dishevelled.' At first the Ablative in such phrases modified the verb of the sentence, but ultimately the original construction was lost sight of, and the phrase as a whole came to be felt as a kind of loose modifier of the rest of the sentence (Ablative Absolute).

Others have regarded the Ablative Absolute as a Locative development. This theory was suggested by the fact that the Locative is the case absolute in Sanskrit. That fact, however, would be of little significance for Latin unless it can be shown that the Locative was the case absolute in the Indo-European parent-speech. But there is nothing to show that such was the case. In fact each language seems to have developed its own case absolute. In Sanskrit we have the Locative, in Greek the Genitive and Accusative; in Gothic there are traces of the Dative;

modern German employs the Accusative. As regards Latin, therefore, there is no anterior probability in favor of any particular case. The question is simply one of evidence, and the evidence points to an Instrumental rather than to a Locative origin. Those who advocate a Locative origin are forced to find the beginnings of the construction in the temporal force of the Locative, e.g. Serviō rēgnante, 'in the time of Servius reigning'; bellō cōnfectō, 'at the time of the war having been finished,' etc. But this explanation seems much less natural than the former.

Another theory, that of Bombe (De Ablativo Absoluto, Greifswald, 1877), refers the Ablative Absolute to the true Ablative for its origin. Bombe explains bellō cōnfectō, etc., as 'after the war having been finished.' But no such use of the true Ablative to denote time after which is known for Latin. Moreover, if Bombe's theory were true, we should expect a predominance of time-words in the early history of the construction; but no such predominance is found to exist.

Locative Uses of the Ablative.

348. The Locative seems to have originally designated the space in or within which something is done. From this meaning the notions at, on subsequently developed (Delbrück, Vergleichende Syntax, p. 183). The Locative uses of the Ablative naturally fall into two classes: Place Relations and Time Relations.

349. Place Relations.—These may be either literal or figurative.

- 1. In its literal force the Locative may mean:
- a) 'in,' as premit altum corde dolorem.
- b) 'on,' as pharetram fert umero.
- c) 'by,' 'near,' as $litore\ curv\bar{o}\ exstruimus\ tor\bar{o}s$. This last appears to be rare.

The preposition, however, is usually necessary to express these relations, except in poetry and late prose, and in the classes of words specified in *Gr.* § 228. 1.

Some recognize a Locative use in tenere se castris, aliquem tecto recipere, pūgnā vincere; but all of these easily admit interpretation as Instrumental usages, and in the phrase conquer in battle, it is significant that the Sanskrit regularly employs the Instrumental case.

- 2. In figurative uses the Locative function of the Ablative is restricted to very narrow limits. Here belong, however, a few phrases such as animīs pendent, lit. 'they are in suspense in their minds' (cf. the Singular animī in animī pendēre); stāre prōmissīs, 'to stand by one's promises'; stāre conventīs; manēre prōmissīs. In his Ablativus, Instrumentalis, Localis (1867), p. 39, Delbrück formerly pronounced in favor of recognizing a Locative usage in connection with glōrior, dēlector. But now in his Vergleichende Syntax, p. 253, this scholar regards the construction as Instrumental in origin. The same explanation is also to be preferred for laetor, gaudēo, etc. Similarly with fīdō and cōnfīdō an Instrumental origin is the more probable, inasmuch as we find this case used in Slavic with verbs of trusting.
- 3. Refert and Interest. The Ablative Singular Feminine of the Possessive with $r\bar{e}fert$ originally limited the $r\bar{e}$ (Ablative of $r\bar{e}s$, 'thing') of $r\bar{e}fert$. If the construction was Locative in origin, $me\bar{a}$ $r\bar{e}fert$ may have originally meant 'it bears towards my affair' (Goal Locative; § 351), i.e. 'it concerns me.' The use of the Ablative Singular Feminine of the Possessive with interest is of secondary origin, being modelled on the construction with $r\bar{e}fert$ in consequence of similarity of meaning. Some regard $me\bar{a}$ $r\bar{e}fert$ as equivalent to ex $me\bar{a}$ $r\bar{e}$ fert; $me\bar{a}$ $r\bar{e}$ has also been explained as a stereotyped Dative (§§ 86. b; 174), and even as a Nominative.
- 350. Time Relations. The transference of the Locative from space relations to relations of time is easy and natural. In this way arose the notions of time at which and within which. The use of the Ablative to denote duration of time, which occurs with some little frequency in the best prose of all periods, e.g. Caesar,

- B. G. i. 26. 5, eaque tota nocte continenter ierunt, is probably not a development of the time within which, but is rather to be referred to an Instrumental origin. This use of the Instrumental to denote duration of time would correspond to the use of the Instrumental to denote the way by which (§ 341. 5).
- 351. Locative of the Goal. Sanskrit and Greek both exhibit a goal use of the Locative. This is the result of extending to verbs of motion a conception primarily belonging only to verbs of rest. Cf. in English he went among the Indians, after he is among the Indians. Examples in Latin are confined chiefly to the archaic period. Thus, forō pōnit (Ennius); locō collocāre (Lucilius); certā parte repōnunt (Lucretius). Genuine Locative formations, humī, domī, etc., also occur in this sense, e.g. domī advenīēns.

Surviving Locative Forms.

352. All the genuine Locative formations in common use are enumerated in Gr. § 232. Beside these we should probably recognize the Locative of an u-stem in $noct\bar{u}$, and (by association with $noct\bar{u}$) in $di\bar{u}$. On $di\bar{e}$, as the Locative of $di\bar{e}s$ in such expressions as $quarti\ di\bar{e}$, $postridi\bar{e}$ (for $posteri\ di\bar{e}$), see § 256. 1. Plural formations in -is from \bar{a} - and \check{o} -stems are more safely regarded as Instrumentals which have taken on all the functions of the Ablative, Locative included. Plurals in -ibus of the Third Declension are certainly Ablative in form. Formations in -e of the Third Declension, $e.g.\ Sulm\bar{o}ne$, may (possibly) be original Locatives, or they may be Instrumentals; § 141.

THE MOODS.

THE SUBJUNCTIVE.

353. The Latin Subjunctive is the result of a fusion of two original moods of the Indo-European parent-speech, the Subjunctive and the Optative. Greek and Sanskrit kept these distinct from each other, but in Latin they early became merged in a

single mood endowed with the characteristic meaning of each. The following table indicates the origin of the different formations appearing in the so-called Subjunctive:

SUBJUNCTIVE FORMS.

- I. All regular Presents, eg. amem, moneam, regam, audiam; §§ 221 f.
- 2. All Imperfects, e.g. essem, amārem, monērem, etc.; § 222. 3.
- 3. All Pluperfects, e.g. amavissem, dixissem, etc.; § 222.4.

OPTATIVE FORMS.

- Presents in -im, e.g. sim, possim, nolim, mālim, velim, edim, duim; § 218.
- 2. All Perfects, e.g. viderim, amaverim, etc.; § 219.
- **354.** Original Force of the Subjunctive. The Indo-European Subjunctive exhibits two meanings which seem to have been the source of all others:
- a) The Subjunctive expresses the will of the speaker, e.g. surgat = 'I will him to rise,' i.e. 'let him rise.' This use implies a certain power or authority on the part of the speaker, i.e. he is represented as willing something over which he has control or volition; hence the name 'Volitive' has been given to characterize this use of the mood.
- b) Alongside of this Volitive notion, the Indo-European Subjunctive also possessed a second force, that of futurity. The Greek, particularly of the Homeric dialect, frequently exhibits this Future force of the Subjunctive; but it is uncertain whether we should recognize it in Latin. In Latin the Subjunctive has a pure Future force only in subordinate clauses, and this may be traced to a different origin. Yet it should be borne in mind that the so-called Future erō was in reality a Present Subjunctive (§ 205. 3); also audiam, regam, etc.; while the so-called Future Perfect is an Aorist Subjunctive (§ 216). All of these formations bear witness to a Future force as having once existed in the Latin Subjunctive.

The connection of meaning between the Future force and the Volitive force of the Indo-European Subjunctive is much closer than might at first appear. Thus the English he's to go clearly

stands on the border line between the two meanings, and may be interpreted either as Volitive, = let him go, or as Future, = he will go.

- 355. Original Force of the Optative. Here we note two different, but closely related meanings, as in the case of the Subjunctive. Thus:
- a) The Optative is used to express an act as wished for by the speaker, e.g. veniat, 'may he come!' The element of power, authority, and volition which characterizes the corresponding use of the Subjunctive is lacking here.
- b) Alongside of the notion of wishing, we find both in Greek and in Latin another notion, viz. that of a contingent futurity, e.g. aliquis dicat, 'some one may say.' This is obviously a weaker type of Future than that belonging to the Subjunctive (in Greek), just as in its meaning of wishing the Optative expresses a weaker phase of thought than the Subjunctive.
- 356. It will be observed that the notion of futurity expressed by the Subjunctive is related to the notion of willing expressed by the same mood as the objective to the subjective. Thus when I employ surgat in its Volitive force the thought is expressed with reference to myself (subjective) = 'he's to stand up, and at my bidding,' i.e. 'let him stand up.' But surgat in its Future sense (assuming theoretically that this use once belonged to Latin) is used without reference to me (objective), = 'he's to stand up, and I have nothing to do with it,' i.e. 'he's going to stand up,' 'will stand up.'

So also in the case of the Optative. *Dīcat aliquis* as a wish, in the sense 'May some one say' is subjective, *i.e.* it is conceived with reference to me; but *aliquis dīcat*, 'some one may say,' is objective, *i.e.* is conceived as outside of, and apart from, me.

The two meanings, therefore, which we discover in the Subjunctive and Optative are in reality in each instance simply two phases (the subjective and the objective) of the same thought.

357. The so-called Latin Subjunctive, as an amalgamation of the original Indo-European Subjunctive and Optative, might naturally be expected to exhibit all four of the original significations, viz.:

Volitive
Pure Future
Optative
Contingent Future
Pindo-European Subjunctive.
Indo-European Optative.

As a matter of fact it represents with certainty only three of them, viz. the Volitive, Optative, and Contingent Future; and from these three primary uses are to be derived all existing Subjunctive constructions in Latin, not only in principal, but also in subordinate, clauses.

The absence of the Pure Future use of the Subjunctive in Latin may be accounted for by the fact that the Subjunctive in that use early came to be felt as Indicative, and as a result various Subjunctive formations actually became Indicatives, erō, audiam, vīderō, etc. (§§ 205. 2, 3; 216). This transition to the Indicative of those Subjunctive forms which possessed the Pure Future force naturally resulted in the restriction of the remaining forms to the Volitive use.

CLASSIFICATION OF SUBJUNCTIVE USES.

SUBJUNCTIVE IN PRINCIPAL CLAUSES.

A. Original Uses.

358. 1. Volitive Subjunctive.

- a) Jussive, expressing a command. This use is found:
 - I) In the Third Singular and Third Plural of the Present tense, e.g. loquatur, 'let him speak'; loquantur, 'let them speak.'
 - 2) In the Second Singular Present, often with indefinite force, but not necessarily so. An example is ūtāre vīribus, 'use your strength,' i.e. 'let a man use his strength' (indefinite).

- b) Of determined resolution. This rare usage is confined to the Present First Singular, e.g. Terence, Hautontimorumenos 273 manē: hōc quod coepī prīmum ēnārrem, 'wait! I'm bound first to finish telling what I began.'
- c) Hortatory. This is confined to the Present First Plural, and is a mingling of a) and b), e.g. $loqu\bar{a}mur$, 'let us speak,' i.e. 'I'm bound to speak, and do you speak.'
- d) Prohibitive. The earlier theory as to the Prohibitive was that the Second Singular Perfect was employed of a definite Second Person, while the Second Singular Present had a general (or indefinite) force. This view has been shown to be false by the exhaustive examination of the subject by Elmer, American Journal of Philology, 1894, No. 3. Elmer's investigation has shown that neither construction is at all frequent in classical prose, and that the real difference of force between the two constructions is that stated in $Gr. \S 276$.
- e) Deliberative. This occurs in affirmative questions often implying doubt, indignation, etc., e.g. quid faciāmus, 'what are we to do!' 'what can we do!' It seems natural to explain this as originally 'we are to do,—what?' 'you want us to do,—what?' 'Cf. the colloquial English, what let's do? for a similar development of a Volitive phrase to an interrogative form.

For derived uses of the Deliberative, see § 363.

- f) Volitive clauses with concessive force, e.g. $n\bar{e}$ sit $m\bar{a}ximum$ malum dolor, malum cert \bar{e} est, 'granting that pain is not the greatest evil, it at least is an evil,' lit. 'let not pain,' etc.
- g) Volitive clauses of proviso, e.g. moderātio vīrium adsit, nē ille dēsīderio vīrium non tenēbitur, 'provided there be a moderate degree of strength, surely a man will not feel the lack of strength,' lit. 'let there be a moderate degree,' etc.

Some scholars attribute the last two uses to the Optative force of the Subjunctive, but the notion of will and authority regularly present in such clauses seems too strong to admit of that interpretation.



- 359. Optative Subjunctive. The original use of the Optative is to denote a wish. This usage is mostly confined to the Third Plural of the Present, e.g. sint felices, 'may they be happy.'
- **360.** Subjunctive of Contingent Futurity. This corresponds to the second of the two meanings of the Indo-European Optative (\S 355. b). From this general notion have developed the following special uses:
- a) Subjunctive of Pure Possibility, e.g. aliquis dīcat, aliquis dīxerit, 'some one may say.' This is the most obvious development of the notion of contingent futurity, but it is rare, being confined chiefly to phrases of the type cited in the above examples. As regards the use of tenses, it has been suggested that the Perfect (originally Aorist; § 219) lays stress upon the accomplishment of the act, while the Present calls attention to its progress.
- b) Where some condition is implied or expressed, e.g. velim, 'I should wish,' i.e. 'if I were to have my way'; dīcās, 'you would say,' i.e. 'if you should have occasion to express an opinion.' This use occurs also particularly in the First Singular of the Perfect (Aorist, § 219), e.g. dīxerim, 'I should say'; crēdiderim, 'I should believe.' Where the condition is expressed, we get a Conditional Sentence of the Second Type (Gr. § 303), e.g. laetēris, sī veniat, 'you would rejoice, if he should come.'

The name Potential is usually given to the Subjunctives cited under a) and b); but this name is somewhat inexact; see § 366.

B. Derived Uses.

- **361.** The uses here enumerated are secondary developments from those cited above in §§ 358 ff.
- 362. Extension of the Jussive. Corresponding to the Jussive loquatur there developed an Imperfect use, e.g. loqueretur, in the sense 'he was to speak,' i.e. 'he should have spoken.' This use is manifestly a derived one, since one cannot now will a person

to have done in the past what he obviously has failed to do. An expression like *loquerētur*, therefore, must have been formed after the analogy of *loquātur*. The Pluperfect Subjunctive also occurs in this sense, e.g. eum imitātus essēs, 'you ought to have imitated him.' The Volitive character of these expressions is shown by the fact that the negative is regularly $n\bar{e}$, e.g. $n\bar{e}$ poposcissēs, 'you ought not to have asked.'

- **363.** Extensions of the Deliberative.—a) Corresponding to the Deliberative use of the Present Subjunctive, e.g. quid faciāmus, 'what are we to do?' we have secondarily quid facerēmus, 'what were we to do!' what could we do!' This usage is just as obviously secondary, as is loquerētur cited above in § 362.
- b) Similarly all negative Deliberatives are of secondary origin. For if $c\bar{u}r$ veniāmus be explained as 'we are to come,—why!' then in negative sentences of this kind we should expect $n\bar{e}$ as the negative, if the sentence be originally Volitive. As a matter of fact the negative is regularly $n\bar{o}n$, and this circumstance shows that the Volitive origin had been lost sight of at the time the negative Deliberative came into existence, *i.e.* negative Deliberative sentences are a secondary development from the affirmative type, not a direct development from the Volitive itself.
- 364. Extension of the Concessive Volitive. Corresponding to nē sint vīrēs in senectūte, 'granting that there is not strength in old age,' we find the Perfect Subjunctive used with concessive force, e.g. fuerit aliīs, tibi quandō esse coepit? 'granted that he was such to others, when did he begin to be so to you?'

It is obvious that this use is secondary, since a volition or act of willing cannot refer to the past. The use of the Perfect could have come into existence only after the concessive use of the Present had become a well-established idiom.

365. Extension of the Optative. — The use of the Imperfect and Pluperfect Subjunctive in expressions like utinam tū valērēs,

utinam adfuisses, is also secondary. For if the primary force of the Optative was to denote a wish, it must have looked forward to the future; hence its employment with reference to the present and the past must be a derived usage, after the analogy of sint felices, etc.

The Imperfect and Pluperfect Subjunctive, in expressions like those cited above, do not strictly express a wish, but rather a regret at the present non-existence or the previous non-occurrence of something.

366. Extensions of the Subjunctive of Contingent Futurity. — There are two derived uses:

- a) The Present 2d Singular in the sense 'you can, one can,' e.g. videās, 'you can see.' In its origin, the Subjunctive of the Contingent Future denoted mere objective possibility, e.g. dīcās = 'there's a possibility, you will say,' 'you may say.' In the derived usage this objective possibility becomes subjective,—'you may' becomes 'you can.' Strictly speaking, only the second of these is Potential. For potentiality involves capacity and control, which mere possibility does not.
- b) The 2d Singular Imperfect. This is restricted to narrow limits, being found chiefly in such expressions as *vidērēs*, 'one could see'; *cernerēs*, 'one could observe'; *crēderēs*, 'one could believe.' The usage is an extension of a) above, and, like that, is Potential in the strict sense of that term.

SUBJUNCTIVE IN DEPENDENT CLAUSES.

367. Parataxis and Hypotaxis.—In the earlier stages of language there were no subordinate clauses. Sentences were joined by co-ordination. For example, an independent use of the Indicative was followed by an independent use of the Subjunctive, or by another Indicative without any conjunction, e.g. eos moneo, desinant, lit. 'I warn them, let them cease.' In course of time in such combinations the one clause came to be felt as subordinate, and

to be introduced by various connecting particles ('subordinate conjunctions'). The stage of co-ordination is called Parataxis; that of subordination, Hypotaxis. In Latin the paratactic form of expression often survives, even when the hypotactic relation has become clearly developed. This is especially noticeable in the early and colloquial language, but is found also in the best prose in certain categories of expression; see, for example, § 385.

All uses of the Subjunctive in subordinate clauses are naturally derived uses.

Subjunctive of Purpose.

368. 1. The Subjunctive clause of Purpose is introduced by ut, nē, quō, quō, quī, and Relative Adverbs. It was probably Jussive in origin, e.g. tibi dō pecūniam ut panem emās originally meant 'I give you money; just purchase bread.' The original force of ut here is somewhat uncertain. Probably it was a weak, Indefinite adverb meaning 'somehow,' 'just.' Cf. ut in ut pereat, 'may he just perish,' uti-nam in utinam veniat, 'may he just come!' This Indefinite force of ut bears the same relation to the Interrogative and Relative meanings 'how?' and 'as' of the same word, as the Indefinite quis bears to the Interrogative quis and the Relative quī.

In course of time the *ut*-clause came to be felt as subordinate to the other, and *ut* from being an adverb came to be felt as a subordinate conjunction. In this way arose the purpose clause with *ut*.

- 1 2. Negative clauses of purpose introduced by $n\bar{e}$ were quite analogous in origin to those introduced by ut. Thus $tibi\ obst\bar{o}\ ne\ intr\bar{e}s$ probably meant originally 'I stand in your way; don't come in!' Ultimately this Parataxis developed into Hypotaxis.
- 3. $Qu\bar{o}$ as an Ablative of Degree of Difference is regularly confined to use in connection with comparatives. The Subjunctive with $qu\bar{o}$ arises in the same way as with other relatives. See 4.
- 4. Quī, quae, etc., in relative clauses of purpose had practically a demonstrative force, e.g. tibi librum do quem legās, 'I give you a book to read,' originally meant 'I give you a book; read it!'

5. Relative Clauses with dignus, indignus, and idoneus have been classified in Gr. § 282. 3 under Relative Clauses of Purpose. This has been done partly on account of the meaning of such clauses, partly in view of the other constructions found with dignus, idoneus, etc. As regards the meaning of the relative clause with dignus, indignus, idoneus, it seems impossible to separate a sentence like dat mihi sūrculos quos seram, 'he gives me shoots to plant,' from dat mihi sūrculos dīgnos quos seram, 'he gives me shoots fit to plant,' originally 'he gives me fit shoots, to plant.' So homines dignos elegit quos mitteret seems originally to have meant: 'he selected fit men, (in order) to send them,' and then, secondarily, 'he selected men fit to send.' In each case the Subjunctive clause is fairly one of Purpose. This view is further confirmed by the other constructions found with dignus, idoneus. Thus we repeatedly find an Infinitive employed with these words, e.g. Verg. Ecl. 5. 45 et puer ipse cantari dignus, 'worthy to be praised'; Pliny, Paneg. 7. 4, dignus ēligī, 'worthy to be chosen.' The Gerund with ad also occurs, e.g. Cic. Rep. i. 18. 30, dignus ad imitandum; and sometimes even an ut-clause, e.g. erās dīgnus ut habērēs (cited by Quintilian from an early author). The ut-clause cannot be regarded as one of Result in this and similar cases, as is done by Kühner, Ausf. Gr. ii. p. 858 d), since the action is viewed purely as one contemplated, not as one accomplished.

Some regard the relative clause with $d\bar{\imath}gnus$, etc., as a Clause of Characteristic. It is of course quite true that $d\bar{\imath}gnus$, with a following relative clause, does express a characteristic in a general way; but the relative clause itself is certainly not a Clause of Characteristic in the technical sense of that term. See § 371.

369. It is obvious that only those purpose clauses are of primitive origin in which the main clause and the subordinate clause refer to different persons. Thus in a sentence of the type $pec\bar{u}$ -niam $m\bar{u}tuor$ ut $libr\bar{o}s$ emam, emam cannot be referred directly

to a Volitive origin, since the Volitive Subjunctive is not naturally used to represent a person as exercising his authority and volition over himself. Sentences like the last, therefore, are more probably of later origin and formed upon the analogy of those cited in § 368.

Clauses of Characteristic.

370. The Clause of Characteristic is a relative clause developed from the Subjunctive of Contingent Futurity (§ 360). Thus in $n\bar{e}m\bar{o}$ est $qu\bar{v}$ putet, the original sense is: 'there is no one who would think'; so sapientia est $\bar{u}na$ quae maestitiam pellat, 'philosophy is the only thing that would drive away sorrow.' But in all these cases the notion of contingency is so slight as easily to disappear, leaving the relative clause essentially one denoting a fact; see also § 406. 1.

371. Clauses of Characteristic as Distinguished from Relative Clauses of Purpose. — Difficulty is often experienced in distinguishing Clauses of Characteristic from Relative Clauses of Purpose. This difficulty results chiefly from the fact that a Relative Clause of Purpose may denote a characteristic of an antecedent in the general sense of the word characteristic. Thus in Cicero, Brutus, 56 scribebat orātiones quas alii dicerent, 'he wrote speeches for other persons to deliver,' the clause quas alii dicerent is a Relative Clause of Purpose; but at the same time it does in a certain sense indicate a 'characteristic' of its antecedent. One essential difference between the Clause of Characteristic and the Relative Clause of Purpose consists in the fact that the former denotes an action or state contemporary with that of the main clause, while the Relative Clause of Purpose denotes an action which is future relatively to that of the main clause. In accordance with this principle expressions like nihil habeo quod agam, 'I have nothing to do' (Hor. Sat. i. q. 19); nīl sciō quod gaudeam, 'I don't know anything to rejoice about'

(Plaut. Capt. 842) are Relative Clauses of Purpose. Did these sentences mean respectively 'I have nothing that I am doing' and 'I don't know anything that I am rejoicing about' (contemporary action), they would be Clauses of Characteristic.

At times we find sentences which are ambiguous. The syntactical nature of the relative clause will then depend upon the interpretation. A good example is Ter. *Phormio* 433 *habēbis quae tuam senectūtem oblectet*, either 'you will have some one who cheers' (Characteristic) or 'some one to cheer' (Purpose).

372. Clauses of Characteristic Denoting Cause or Opposition. — In sentences like \bar{o} fortunāte adulēscēns quī tuae virtūtis Homērum praecōnem invēneris there is an apparent violation of the principle that the Clause of Characteristic refers to 'an antecedent not otherwise defined' ($Gr. \S 283. I$); but in such cases as this we may explain the relative as referring to an indefinite antecedent to be supplied. According to this view the original force of the above sentence would have been: 'O! fortunate man, (one) who has found,' etc. The frequent employment of ut quī, utpote quī, etc., 'as being one who,' supports this view. The use of the Second Singular in the subordinate clause would then be a species of attraction.

373. Clauses of Characteristic Introduced by Quīn. — The treatment in $Gr. \S 283$. 4 follows that of Brugmann in Indogermanische Forschungen, vol. iv. p. 226 ff. Brugmann sees in the first element of this quīn an indeclinable Relative $qu\bar{\imath}$, which he thinks was capable of standing for any case either Singular or Plural. According to this view, $qu\bar{\imath}n$ might be equivalent to $qu\bar{\imath}$ $n\bar{o}n$, quae $n\bar{o}n$, quod $n\bar{o}n$, etc.; the $qu\bar{\imath}n$ mentioned in §§ 383, 391 must then be regarded as a separate word.

Clauses of Result.

374. Clauses of Result, introduced by ut, ut non, quin, qui, are a development of the Subjunctive of Contingent Future, viz. from

its second phase, where there is a condition implied (§ 360. b). Thus in the sentence hōc flagitium tāle est ut quīvīs ōderit, the original meaning was: 'this outrage is of such a nature as anyone you please would hate' (i.e. if he should see it). From this to the meaning 'of such a nature that anybody you please hates it,' is an easy transition. Cf. in English, Shakespeare, Julius Cæsar, 3. 2 Who is here so base that would be a bondman? i.e. as to be a bondman. See Hale, Sequence of Tenses, p. 24, who cites other illustrative uses from English and Greek.

- 375. Relative Clauses of Result are simply a development of the Clause of Characteristic. At times it is not easy to decide whether the clause is one of Characteristic or of Result, and individual interpretations of the same sentence would doubtless often differ. For example, in the sentence given in Gr. § 284. 2 habētis eum consulem quā pārēre vestrīs dēcrētīs non dubitet, the clause quā . . . dubitet might be felt by some simply as a Clause of Characteristic, 'a consul of the sort that'; but the clause also admits the interpretation 'a consul such that he does not hesitate'; and in that sense it is a clause of Result.
- 376. Clauses of Result with Quīn. These are really Relative Clauses of Result, and differ from Clauses of Characteristic introduced by quīn just as ordinary Relative Clauses of Result differ from ordinary Clauses of Characteristic. Wherever the main clause contains tam, tālis, etc., the Result notion is sufficiently clear.

Causal Clauses.

- 377. Causal Clauses Introduced by Quod, Quia, Quoniam. When these take the Subjunctive, it is on the principle of Indirect Discourse.
- 378. Causal Clauses Introduced by Cum. The Subjunctive with cum-causal is a development of the temporal cum-clause. The temporal notion easily passes into the causal in all languages.

Cf. e.g. in English 'When he saw ruin staring him in the face, he did not care to live,' i.e. 'since he saw,' etc.

Clauses with Cum-Temporal.

379. The treatment in the Grammar, § 288 f., follows the elaborate and convincing exposition of Hale in his Cum-Constructions, Cornell Studies in Classical Philology, Vol. i. (Ginn & Co.). Hale shows that the cum-clause is simply a form of the Clause of Characteristic. Cum, earlier quom (Gr. § 9. 1), is a form of the Relative stem quo-, and, as such, was quite as capable of introducing a Clause of Characteristic as was any other Relative word. Thus the Subjunctive cum-clause primarily characterized a time by giving the situation existing at that time, just as any other Clause of Characteristic. The Indicative cum-clause, on the other hand, like the Indicative quī-clause, was primarily a defining clause and hence used to denote a point of time or date.

Clauses Introduced by Antequam and Priusquam, and by Dum, Donec, and Quoad.

380. Where these are followed by the Subjunctive, Hale (The Anticipatory Subjunctive in Greek and Latin, Chicago Studies in Classical Philology, Vol. i., University Press of Chicago [printed separately], p. 68 ff.) recognizes a survival in Latin of the Indo-European Subjunctive in its Pure Future phase,—a phase conspicuously present in Homeric Greek. Others refer the Mood to the Subjunctive of Contingent Futurity (the second of the two uses of the Indo-European Optative; § 360).

SUBSTANTIVE CLAUSES.

Substantive Clauses Developed from the Volitive.

381. Many of these are often regarded as Substantive Clauses of Purpose. Such a designation implies either that the clauses in question *are* Purpose Clauses or once *were* such; neither of these

alternatives represents the truth. With the exception of the clauses mentioned in $Gr. \S 295. 3$, all the substantive clauses included in § 295 are the developments of an earlier parataxis (see § 367), in which the Subjunctive was Volitive (Jussive, Deliberative, etc.) in nature.

382. The earliest form of these clauses would be represented by such examples as $t\bar{e}$ $\bar{o}r\bar{o}$; eum juvēs, lit. 'I entreat you; help him!' Sometimes, especially in early Latin and in the poets, we find the inverted order, e.g. eum juvēs, $t\bar{e}$ $\bar{o}r\bar{o}$, 'help him! I entreat you.' In both instances the Volitive character of the Subjunctive is clearly apparent. Sentences of the type $t\bar{e}$ $\bar{o}r\bar{o}$ ut eum juvēs, are a later development, the ut being added after the Subjunctive had come to be felt as an object clause and as needing some introductory particle. This need of an introductory particle in affirmative clauses of this kind would be felt the more keenly, since in negative clauses, e.g. $t\bar{e}$ $\bar{o}r\bar{o}$ $n\bar{e}$ abe $\bar{a}s$ (originally 'I entreat you; don't go away!'), the $n\bar{e}$ had come to be felt as a subordinate conjunction; at the outset, of course, it was a mere negative adverb.

383. Substantive Clauses Introduced by Quōminus and Quīn after Verbs of hindering. — As explained in Gr. § 295. 3 a, clauses of this sort are probably developed from genuine Purpose Clauses. However, they have their ultimate origin in the Volitive, since the Purpose Clause is a development from the Volitive (§ 368. 1). The original character of Subjunctive clauses of this kind may be seen in an expression like formīdō virōs impedit quōminus velint, originally: 'fear hinders men, in order that they may not be willing,' i.e. prevents them from being willing. Quōminus lit. means 'by which the less, by which not,' and hence 'in order that not.'

Clauses with $qu\bar{i}n$ after verbs of hindering are apparently of the same nature as clauses with $qu\bar{o}minus$. Quin is compounded of $qu\bar{i}$ (an old Instrumental) and ne, lit. 'by which not,' 'that not,'

'lest.' In signification it is nowise different from quōminus. In fact, after verbs of hindering accompanied by a negative, quōminus and quīn may be used interchangeably without difference of meaning. Thus Cic. de Sen. 17. 60 nec aetās impedit quōminus agrī colendī studia teneāmus, 'nor does old age prevent us from continuing the pursuits of farming'; but Auct. ad Herenn. iii. 1. 1 nē impediāris quīn prōgredī possīs, 'that you may not be prevented from being able to advance.'

Clauses introduced by quīn after negative expressions of hindering are sometimes classified as Result Clauses. Such a classification is inconsistent; for te impedio quōminus faciās is regularly taken by all grammarians as a Purpose Clause. If it is, then nec te impedio quōminus faciās must also be a Purpose Clause, for the mere prefixing of the negative to impedio cannot alter the relation of the quōminus-clause to its verb. But nec te impedio quōminus faciās may be expressed with perfect equivalence by nec te impedio quōm faciās. Hence the two types should not be dissociated in treatment.

It is of course true that in its developed meaning the quinclause after negative expressions of hindering does at times seem to indicate a (negative) result, e.g. nec impedītī sunt quīn facerent may be conceived as literally meaning 'nor were they prevented so that they didn't do.' But this conception is just as possible in case of quominus-clauses after negative expressions of hindering, and even more so in case of quominus-clauses after affirmative expressions of hindering. Thus, te impedio quominus haec faciās might theoretically be conceived as meaning 'I hinder you so that you do not do this.' But quo minus is clearly a purpose particle, so that the original purpose character of the quōminus clause seems beyond question. Any consistent treatment of Substantive clauses must have regard to their origin, not merely to the English rendering. Thus, in a sentence like eis persuāsit ut extrent, 'he persuaded them to go out,' the ut-clause might seem at first sight to indicate a Result, but an examination of such clauses clearly shows that they are developed from the Jussive.

Clauses introduced by $n\bar{e}$ after verbs of hindering are not necessarily developed from the Jussive, as suggested in Gr. \$295.3. This is the more probable view; but it is also possible that, like $qu\bar{o}minus$ and $qu\bar{n}$ -clauses, they have been developed from Purpose Clauses.

- 384. Substantive Clauses after Verbs of deciding, resolving, etc. (Gr. § 295. 4). The Volitive origin of these is seen in such sentences as Sall. Cat. 29. 2 senātus decrevit operam darent consules, 'the senate decreed: let the consuls take heed!' Ter. Eun. 578 ēdīcit nē vir quisquam ad eam adeat, 'he issues the order: let no man go near her!'
- 385. Substantive Clauses after Verbs of striving, caring for, etc. ($Gr. \S 295. 5$). Expressions like fac cogites, 'see to this, reflect!' (Sall. Cat. 44. 5) point to the Volitive origin of these clauses. $C\bar{u}r\bar{a}$ $n\bar{e}$ quid $d\bar{e}sit$ originally meant 'Take care: let nothing be wanting!'
- 386. Substantive Clauses after necesse est, reliquum est and sequitur, 'it remains,' licet, oportet (Gr. § 295. 6).— The Volitive origin of the Subjunctive in clauses with necesse est, licet, oportet, is seen in the regular retention in classical prose of the early type of expression without ut (§ 382), viz. dīcam necesse est, 'it is necessary that I speak' (lit., let me speak; it is necessary'), Cic. de Or. iii. 22. 85; taceat oportēbit, 'it will be fitting that he keep silent' (lit. 'let him keep silent; it will be fitting'), Cic. de Or. iii. 21. 79; fateāre necesse est, 'confess! you must,' Lucr. iii. 275.

Where sequitur means 'it remains,' 'the next thing is,' the utclause is a development from the Volitive, e.g. sequitur ut doceam, 'it remains for me to show,' Cic. Nat. De. ii. 32. 80.1

¹ Sequitur in the sense 'it follows that' takes a Substantive Clause of Result; § 390.

So also with reliquum est, e.g. reliquum est, ut egomet mihi consulam, 'it remains for me to look out for myself,' Nep. Att. 21. 5. This view of these clauses is confirmed by the occurrence of the early form of expression without ut (§ 382), e.g. Cic. ad Fam. xv. 21. 6 reliquum est tuam profectionem amore prosequar.

387. Substantive Clauses in Sentences of the Type: nūlla causa est cūr, nūlla causa est quārē, etc. (Gr. § 295. 7). — These have been explained as developed from the Deliberative. This is the view, among others, of Schmalz (Lat. Synt. § 308), and is supported by the history of these clauses. Cf. e.g. Cic. ad Fam. ii. 17. I quīn dēcēdam nūlla causa est, originally 'why shouldn't I go away! There's no reason,' later 'there's no reason why I shouldn't go away.' Cf. Ter. Andria 600 quid causae est, quīn in pīstrīnum proficīscar, 'what reason is there why I shouldn't set out for the mill!' originally 'what reason is there? Why shouldn't I set out?'

Substantive Clauses Developed from the Optative.

- 388. After Verbs of wishing and desiring (Gr. § 296. 1). The Optative origin of these Substantive clauses is sufficiently evident. It should be noted, however, that in comedy and colloquial language $vol\bar{o}$ sometimes has the force of commanding (cf. the English authoritative I want, e.g. in I want you to understand). In such cases the Substantive clause with $vol\bar{o}$ must be referred to a Volitive origin, e.g. $vol\bar{o}$ eam $d\bar{u}c\bar{a}s$, 'I want you to marry her.'
- 389. After Verbs of fearing (Gr. § 296. 2). Instructive for the history of the construction are such early Latin uses as Ter. Andr. 277 Haud verear sī in tē sit sōlō situm: sed ut vim queās ferre, 'I should not fear, if it were to depend on you alone; but

¹ Reliquum est in the sense 'the fact remains that' takes a Substantive Clause of Result; § 390.

may you be able to withstand compulsion'; 705 dies hie mi ut satis sit vereor ad agendum, 'may this day be sufficient (I'm afraid though).'

Substantive Clauses of Result.

390. Expressions like efficio ut intellegatis, lit. 'I bring it to pass (in such a way) that you know,' and accidit ut aegrōtāret, 'it so happened that he was ill,' show clearly the origin of the Substantive Clause of Result. But the Result notion early became weakened in these clauses, and the substantive notion became so prominent that Substantive Clauses introduced by ut occur where not only no notion of Result exists, but where it never could have existed, e.g. vērīsimile non est ut ille anteponeret, 'it's not likely that he preferred'; accēdit ut doleam, 'another fact is that I am suffering'; praeclārum est ut eos amēmus, 'it's a noble thing that we love them'; reliquum est ut virtūs sit frūgālitās; 'the fact remains that economy is a virtute.'

Substantive Clauses Introduced by Quin.

391. In the expressions non dubito quin, quis dubitat quin, non est dubium quin, haud dubium est quin, the quin-clause is probably developed from the Deliberative Subjunctive. Thus quis dubitat quin in virtute divitiae sint originally meant 'why shouldn't there be riches in virtue! who doubts it?' It seems difficult to find any ground in the history or signification of these clauses for regarding them as Clauses of Result.

Indirect Questions.

392. The origin of the Subjunctive in Indirect Questions is not yet clear. The construction is manifestly a relatively late one in the development of Latin syntax. Plautus and Terence more frequently employ the Indicative in such sentences, unless there be some reason for the Subjunctive.

Conditional Sentences.

- **393.** The treatment in the *Grammar* follows the traditional classification, which has regard exclusively to what is implied in the Protasis in each instance.
- 394. Conditional sentences are the development of an earlier Parataxis (§ 367). Thus we may assume that the earliest type of sī valet, bene est was bene est, valet, 'it is well; he is well.' The conditional force was purely the result of the context, which indicated that valet was something assumed. As language developed, the fact that one clause was related to the other as an assumption or condition was brought out more definitely by the use of $s\bar{i}$; yet conditional sentences without $s\bar{i}$ occur with more or less frequency in all stages of the Latin language (Gr. § 305. 2). They are simply a relic of the earlier paratactic stage. The origin of the conjunctional use of $s\bar{i}$ was as follows: $S\bar{i}$ was originally an adverb meaning so. It is etymologically identical with English so, and by formation was a Locative, *sva-i, from the Indo-European root $sv\bar{a}$. This *svai regularly became $s\bar{i}$; § 104. 2. The most primitive type of a conditional sentence with $s\bar{i}$ would be seen in bene est sī, valet, i.e. 'it is well so (viz. that), he is well.' In this expression sī limits bene est, and valet is really an appositive of the adverbial idea in $s\bar{i}$. The use of $s\bar{i}$ as a conjunction is secondary and the result of its association. With sī cf. English so in such expressions as so you pay me, I shall be satisfied.
- **395.** Conditional Sentences of the Second Type. Here the Subjunctive in the Protasis was originally Jussive in character. Thus a sentence like $s\bar{\imath}$ videat, $cr\bar{e}dat$ would, in its earliest form, have been videat, $cr\bar{e}d\bar{a}t$, lit. 'let him see (i.e. assuming he should see), he would then believe.' The Apodosis is the Subjunctive of Contingent Futurity, conventionally called 'Potential.'
- 396. Conditional Sentences of the Third Type.—The origin of this type is obscure. Perhaps the Protasis was originally an

Optative, i.e. sī adesset, bene esset, lit. 'O that he were here! it would be well.'

The employment of oportuit, decuit, debebam, and of the Indicative of the Periphrastic Conjugations in Apodoses of Conditional Sentences of this type is frequently the result of ellipsis. Thus in sī Pompējus occīsus esset, fuistisne ad arma itūrī, the thought is 'were you about to proceed to arms (and would you have done so?) had Pompey been slain?' So in eum patris locō colere dēbēbās, sī ūlla in tē pietās esset the full sense is: 'it was your duty to revere him (and you would now be doing it), had you any sense of devotion.'

Clauses of Proviso with Dum, Modo, Dummodo.

397. These were all originally Jussive. Thus in manent ingenia senibus, modo permaneat studium et industria, the original sense was: 'let only interest and vigor remain! (then) old men's faculties remain.' Dum was originally an oblique case of a noun meaning 'while.' Hence in ōderint, dum metuant, the original sense was 'let them fear the while! (then) they may hate.' Some regard the clause of Proviso with dum as originally temporal ('while'). But that view fails to account for the use of the Subjunctive, and also ignores the fact that the negative with the dumclause of Proviso is always $n\bar{c}$.

Use of Moods in Relative Clauses.1

398. A relative clause represents a kind of subordination which, in its original and simplest form, differs from co-ordination only in the substitution of a relative pronoun, adjective, or adverb for the corresponding demonstrative or personal pronoun. The expression ille est hom \bar{o} qui fecit, 'he is the man who did it,' is in every respect exactly like ille est hom \bar{o} ; ille fecit, 'he is the man; he

¹ This treatment of Relative Sentences is the friendly contribution of my colleague, Professor Elmer.



did it,' except that $qu\bar{i}$ has taken the place of *ille*. Such a transition from parataxis to hypotaxis is well illustrated in English by the history of the word *that*, which, though originally only a demonstrative pronoun, has come to be frequently felt also as a relative.

The earlier history of the Latin language shows an increasing fondness for the relative construction. In the classical period this tendency had become so pronounced that the relative was often used to introduce a sentence that was logically quite independent, e.g. Cic. de Sen. 3. 8 nec hercule, sī ego Serīphius essem, nec tū, sī Athēniēnsis, clārus umquam fuissēs. Quod eōdem modō dē senectūte dīcī potest, — instead of hōc . . . potest.

This use of the relative to introduce a logically independent sentence is almost unknown in Plautus, but becomes more common in Terence, and reaches its height in the time of Cicero.

While relative clauses in their earliest stage could be replaced by grammatically independent clauses, they gradually acquired functions which the corresponding independent clauses did not perform. We may accordingly divide Relative Clauses (both Indicative and Subjunctive) into those of original and those of developed types.

INDICATIVE RELATIVE CLAUSES.

399. An Indicative Relative Clause may:

- 1) Inform one of a fact.
- 2) Refer for various purposes to a fact presumably already known.
 - 3) Assume a fact.

A. Original Uses.

400. 1. The Determining Clause. — This apparently was used in connection with some object to which the speaker was pointing or at which he was looking. The clause then identified that ob-

ject as the one with reference to which the act or state expressed by the clause was true. Two independent clauses, each introduced by a demonstrative, would express this relation equally well. Cf. That is the man that did it, in which the second that originally corresponded exactly to the Demonstrative ille, but later came to be felt as subordinating its clause and so equivalent to the Relative $qu\bar{\imath}$.

- 2. Clauses Adding Information or a Statement of Fact.—These may be subdivided as follows:
- a) Parenthetical clauses that interrupt for a moment the train of thought, e.g. Livy xxii. 13. 11 nec abnuebant, quod ūnum vinculum fideī est, melioribus pārēre, 'nor did they refuse (and this forms the only bond of fidelity) to obey their betters.'
- b) Independent clauses that carry forward the train of thought, e.g. nec hercule, sī ego Serīphius essem, nec tū, sī Athēniensis, clārus umquam fuissēs. Quod eodem modo de senectūte dīcī potest.
- 3. Causal and Adversative Clauses.—It is commonly stated that these clauses require the Subjunctive; yet they often admit the Indicative, e.g. (causal) Cic. ad Att. xiii. 30 \overline{O} te ferreum qui illius periculis non moveris, 'O you hard-hearted man, who (i.e. since you) are not moved'; (adversative) Cic. Phil. i. 9. 23 quae quidem ego, qui illa numquam probāvī, tamen conservanda arbitrātus sum, 'enactments which, though I never approved them, I nevertheless thought ought to be maintained.' See Hale, The Cum-Constructions, p. 114 ff. The difference between the Indicative and the Subjunctive in such clauses seems to be that the Indicative calls to mind the fact without special reference to its logical relation to the principal clause, while the Subjunctive brings this relation into prominence.

B. Developed Uses.

401. 1. Determining Clause of the Developed Type. — This clause serves as a means by which, without further aid, one may distinguish from all other objects one particular object (or sev-

eral particular objects). For this purpose it mentions some act or state which is, for the moment at least, exclusively associated with the object referred to, e.g. ille quī in Catilīnam ōrātiōnēs scrīpsit annōs trēs et sexāgintā vīxit. This sentence cannot be divided into two independent assertions, as can the clause of the original type. Two such sentences as ille in Catilīnam ōrātiōnēs scrīpsit; ille annōs trēs et sexāgintā vīxit, would, without the presence of the person referred to or further explanation, be meaningless. On the other hand, the clause with the Relative is complete in itself.

- 2. Clause Equivalent to Sī with the Indicative. This clause deals not with any individual case, but with an assumed indefinite case. It takes the Indicative wherever a $s\bar{\imath}$ -clause would take this mood under similar circumstances, e.g. $qu\bar{\imath}$ valet, $fort\bar{\imath}un\bar{\imath}tus$ est, 'the man who has good health is blest' (= $s\bar{\imath}$ quis valet, etc.). This usage probably arose through the medium of the determining clause.
- 3. Restrictive Clauses having Attinet, Est, Potest, as their Verb, e.g. ut se tōta rēs habeat, quod ad eam cīvitātem attinet, dēmōnstrābitur, 'how the whole matter stands as regards that state, will be shown.' For the Subjunctive in restrictive clauses, see § 406. I. N. I.
- **402.** It should be carefully noted that any Indicative relative clause of whatever type may characterize the antecedent of the Relative. Examples:
- 1) Determining and characterizing, tum prīmum reperta sunt quae per tot annos rem pūblicam exēdēre, here 'the (particular) things which,' etc. This quae-clause is primarily determinative, incidentally characterizing. If it had had the Subjunctive exēderint, the clause would have been primarily characterizing and the meaning would have been: 'things were found which' instead of 'the (particular) things which.' See below under Subjunctive uses, § 406. I.

- 2) Parenthetical and characterizing, e.g. ego, quī sum longē fortior, famē pereō. Here the $qu\bar{\iota}$ -clause is a parenthetical statement that characterizes the antecedent. It may be laid down as a rule (to which exceptions are rare) that a characterizing clause takes the Indicative when it may be dropped without impairing the sense of the main clause. In the sentence last given, ego pereō famē is complete in itself without the addition of the $qu\bar{\iota}$ -clause. See Hale, The Cum-Constructions, pp. 85, 94, 138.
- 3) Conditional and characterizing, e.g. neque enim est $\bar{u}lla$ fortitudo, quae rationis est expers, 'for there is no bravery, which lacks reason,' i.e. 'if it lacks reason,' whence the Indicative. In such conditional clauses, however strongly characterizing they may be, the Subjunctive is rare and confined almost exclusively to clauses with negative antecedents. See Hale, The Cum-Constructions, p. 133.

We may say, generally speaking, that three things are necessary to throw a characterizing clause into the Subjunctive (except where the Subjunctive would be used in the corresponding paratactical form of expression): First, it must be essential to the thought of the main clause; secondly, its characterizing function must be primary, not incidental; thirdly, it must not be equivalent to an Indicative clause with $s\bar{s}$. Characterizing clauses that do not fulfil these three conditions stand, with rare exceptions, in the Indicative.

SUBJUNCTIVE RELATIVE CLAUSES.

403. A Subjunctive Relative Clause may give expression:

- 1) To somebody's will.
- 2) To a possibility.
- 3) To a future contingency.
- 4) To actual facts (with or without a causal or adversative bearing upon the main clause).

Any one of these clauses may be used to characterize the antecedent of the Relative.

A. Original Uses.

404. 1. Representing an Independent Volitive.

- a) Relative Clause of Purpose, e.g. mīlitēs missī sunt quī oppidum capiant, 'the soldiers have been sent to take the town.' The quī-clause here represents an independent illī capiant, 'they shall take (let them take) the town.' Cf. the identical development of ut-clauses of Purpose, § 368.
- b) Volitive Characterizing Clause, e.g. Cic. de Sen. 43 quī jūdicābant esse profectō aliquid nātūrā pulchrum atque praeclārum, quod suā sponte peterētur, quodque optimus quisque sequerētur, 'these were of opinion that there surely existed some lofty and noble ideal, to be sought for its own sake, and for all the best men to pursue.' The quod-clauses here represent independent Volitive Subjunctives meaning: 'let this be sought'; 'let all good men pursue this.' Such clauses should be carefully distinguished from relative clauses denoting pure purpose, as in the example given under a).
- c) Clause equivalent to $s\bar{s}$ with the Subjunctive. Examples: $n\bar{u}lla$ tam facilis $r\bar{e}s$, $qu\bar{u}n$ difficilis siet, quam inv $\bar{v}tus$ faci $\bar{u}s$, 'nothing is so easy that it does not become difficult, if you do it against your will,' lit. 'assuming you do it'; philosophia, cui $qu\bar{v}$ pāreat omne tempus sine molestiā possit dēgere, i.e. if one should obey philosophy, etc.

For further illustration of the Volitive Origin of such clauses, see § 395.

2. Characterizing Clause Representing an Independent Potential, e.g. est unde fiat, 'there exists that by means of which it may (can) be done.' The unde fiat here represents an independent inde fiat, 'by that means it may (can) be done,' which ascribes certain possibilities to the means referred to in inde, i.e. characterizes them.

This form of clause is rare, its place being commonly taken by some form of potest with the Infinitive.

- 3. Clauses Developed from a Subjunctive of Contingent Futurity.
- a) Characterizing Clause of Contingent Futurity, e.g. ille est quī non mentiātur, 'that's a man who would not deceive.' Here quī non mentiātur represents an independent ille non mentiātur, 'that man would not deceive.'
- b) Characterizing Clause of Obligation or Propriety, e.g. nihil est quod gaudeās, originally, 'there is no reason why one would rejoice (if one were to act with propriety),' hence 'no reason why one should rejoice, ought to rejoice.'
- 405. Hale, in his recently published Anticipatory Subjunctive in Greek and Latin, expresses himself in favor of recognizing a new class of relative clauses developed from the Anticipatory Subjunctive, i.e. from the phase of the Indo-European Subjunctive which had pure Future force (see § 354). As illustrations of this type he cites: Vergil, Aen. i. 286 f. nāscētur pulchrā Trōjānus orīgine Caesar, imperium Ōceanō, fāmam quī terminet astrīs, 'who shall bound,' etc.; Eclogues, 4. 34 f. alter erit tum Tīphys, et altera quae vehat Argō dēlēctōs hērōas, 'and a second Argo, which shall carry,' etc. Others regard such clauses as a secondary development of Purpose Clauses.

B. Developed Uses.

- **406.** These are all outgrowths of the Subjunctive of Contingent Futurity. Here belong:
- 1. Characterizing Clauses Asserting an Actual Fact (technically designated as 'The Clause of Characteristic'; Grammar, § 283; App. § 370), e.g. ille est quī non mentiātur, 'he's a man who doesn't deceive.' This represents an easy transition from the original meaning of such clauses (cf. § 404. 3. a), viz. 'a man who would not deceive (under any circumstances).'
- Note 1. A still further development of these clauses is represented by such expressions as Catōnis ōrātiōnēs quās quidem invē-

nerim, lit. 'the speeches of Cato that I have discovered,' i.e. 'at least so far as I have discovered them.' Here the characterizing clause has weakened into one that merely restricts. Strictly speaking, the discovery of the speeches has nothing to do with their character.

- NOTE 2. A clause that is *primarily* characterizing may be *incidentally* determinative. See § 402.
- 2. Causal Clauses, e.g. miserum senem, quī tam longā in vītā mortem contemnendam esse nōn vīderis, 'O pitiable old man, who (since you) have not even in so long a life discovered that death ought to be regarded with indifference.' This use probably began with some such expression as Clōdius contemnendus est, quī quaelibet faciat, ut inimīcum expellat, 'Clodius should be treated with scorn, who (since he) would stoop to anything whatever to get rid of a personal foe.' Such a quī-clause would easily come to mean 'who stoops to anything,' etc. A feeling might then naturally arise that any quī-clause bearing a causal relation to the main clause might take the Subjunctive.

For the difference of meaning between the Indicative and the Subjunctive in causal $qu\bar{i}$ -clauses, see § 400. 3.

3. Adversative Clauses. — The Subjunctive in these clauses has had a history similar in every way to that of the Subjunctive in causal clauses.

For the difference of meaning between the Indicative and the Subjunctive in adversative $qu\bar{i}$ -clauses, see § 400. 3.

407. It will be understood that what has been said of $qu\bar{i}$ -clauses applies equally to relative clauses introduced by ubi, $qu\bar{o}$, unde, etc.

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¹ For words containing hidden quantities and for words of doubtful or varied spelling, see the special lists, p. 52 and p. 79.

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